

MARCH 1952 25c

Custom Trends Predicted

—See Page 18

SAVING TAX DOLLARS

Full Story on Road Race

# MOTOR TREND

The Magazine for a Motoring World



TESTING THE '52  
V-8

Reynold Brown

SOME OUTSTANDING VICTORIES AND ACHIEVEMENTS



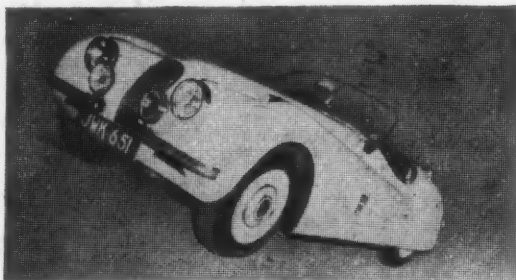
JABBEKE (BELGIUM) 1949 (132.6 m.p.h. — flying mile)



ALPINE TRIAL, 1950 — 1951



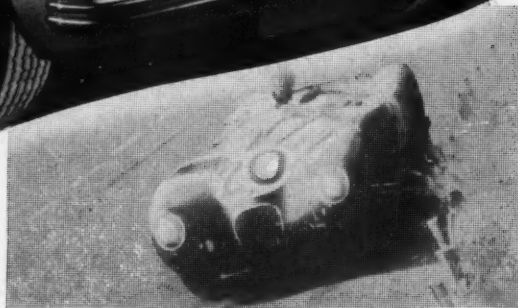
SILVERSTONE 1949 — 1951



MONTLHERY 1950 — 107 m.p.h. for 24 hours  
1951 — 131.8 miles in 1 hour



R.A.C. TOURIST TROPHY (N. Ireland) 1950 — 1951



LE MANS, 1951

THE FASTEST PRODUCTION SPORTS CAR IN THE WORLD

# JAGUAR

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Eastern States: The Hoffman Motor Car Co., Inc., 487 Park Avenue, New York 22, and at Esquire Building, South Water Street, Chicago.



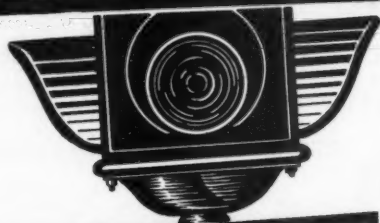




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... WASTING GAS!  
... HIGH REPAIR COSTS!



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CERTIFIED 1950 APPROVED

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REG. U.S. PAT. OFF.

### MILES PER GALLON AND MOTOR TUNE-UP GAUGE

*David E. Reeves of San Diego, Calif. Says ...*

"I am more than pleased with your product. In these days of false advertising, it is indeed refreshing to find a product that not only lives up to its advertising, but I feel, is superior to its advertising. Your "Mile-O-Meter" has been so satisfactory on my Olds, that I am recommending it to all Hydra-Matic, Dyna-Flow, Ultra-Matic and Fluid-Drive owners. Upon my recommendation, one of my friends installed your product on his 1950 Chry'ser Windsor. By looking at the gauge, he can tell just when to let his Fluid-Drive shift gears. I have talked with many more of my friends using your equipment, and the opinion is that one really doesn't know how to drive an automobile until he drives with your gauge attached."



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SUPPLY YOU, ORDER DIRECT TODAY!**



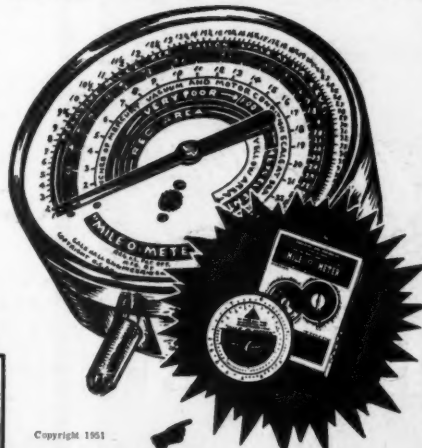
TEACHES you how to drive economically — eliminates the Jack Rabbit starts and passing on hills — that's where you really drink up fuel.



YOU can check your engine condition at all times, and if it is not operating efficiently, Mile-O-Meter will tell you how to correct the condition.



SIMPLY mount meter on windshield frame or on dashboard area to suit your convenience with the aid of mounting brackets that can be bent into practically any position.



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"MILE-O-METER" Mileage Calculator and HUGE 24 page instruction book included FREE with your order. **SEND TODAY!**

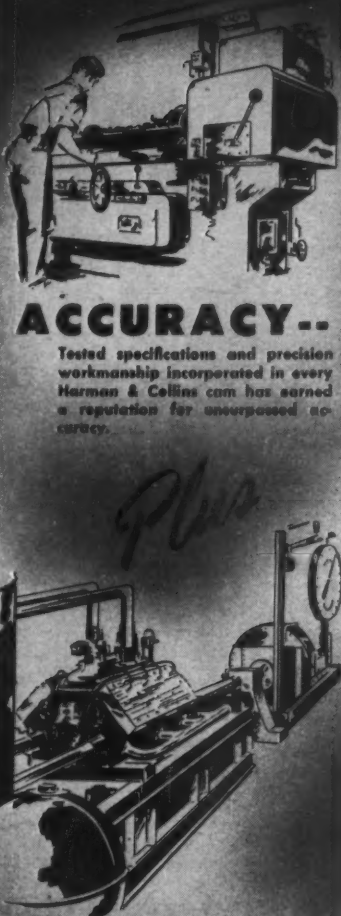
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LOS ANGELES 32, CALIFORNIA  
Capitol 4610

# MOTOR TREND

THE MAGAZINE FOR A MOTORING WORLD

MARCH 1952

Published Monthly



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## CONTENTS

### FEATURES:

'52 STUDEBAKER V-8 MOTOR TRIAL.....	By Walt Woron—15
TRENDS IN CUSTOMS.....	By George Finneran—18
SAVING TAX DOLLARS.....	By Eugene Jaderquist—20
MEXICAN ROAD RACE.....	By Troy Ruttman—22
"MONTE CARLO" CUSTOM BUICK.....	26
LEBARON, AMERICAN DESIGNER.....	By Eugene Jaderquist—28

### DEPARTMENTS:

READER REFLECTIONS.....	6
RANDOM SHOTS.....	8
SPOTLIGHT ON DETROIT.....	By Harry Cushing—10
YOUR EDITOR SAYS.....	By Walt Woron—12
ACCESSORY TRIAL—RAJO RETURNS.....	33
SPORTING SCENE.....	38
OVERSEAS NEWSLETTER.....	By A. Devereux—44
SELL 'N' SWAP.....	48
TRADE TOPICS.....	50

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## In This Issue...

IT'S WITH GENUINE pleasure that we welcome back old-time contributor George Finneran this month—see "Custom Trends." His early writings in *MOTOR TREND* on customs and classics always excited lively comment and now, after a stretch of writing for one of the major movie studios and building a car or two, Finneran is turning his attention to automotive writing once more.

Although Eric Rickman came back from the Mexican Road Race as loaded with notes as he was with pictures, when we heard Troy Ruttman's pointed and perceptive summation of the race, the decision to run it instead was an easy one. We'd like to know what you think of his comments on stock car racing in general.

**CORRECTION:** In February's Engineering Award story, in the column headed \$/rhp (dollars per road horsepower), we put Nash Ambassador, Kaiser and Hudson in the proper positions but somewhere in the frantic trip through the presses the figures came out wrong. They should read:

Nash Ambassador	44.9
Kaiser	45.9
Hudson	32.8

### AND IN THE NEXT . . .

IN THE LIGHT of its magnificent one-two win in the Mexican Road Race followed immediately by a sports car victory at Palm Beach Shores, Ferrari becomes, more than ever, the most outstanding automobile of the postwar world. Foreign car authority Michael Brown has prepared for us the story of Scuderia Ferrari—from its beginnings in '32 to its plans for a super passenger car for the not-distant future.

In last November's *MOTOR TREND*, we brought you Eric Irwin's story on how to build a Fiberglass sports car. In our next issue, another part of the Fiberglass story will be told: How you can assemble your own such sports machine from a readily available kit, and do it for under \$1000.

"If Detroit Won't Do It, Why Don't You?" will usher in a new type of article in *MOTOR TREND*: getting more efficiency, more power from your own production automobile. The modifications suggested can save you money, while greatly increasing the pleasure-value of your car.

### OUR COVER

WHEN WE asked artist Reynold Brown to paint this month's cover long before the Mexican Race was run, we guessed that the top contenders would be Ferrari and Chrysler—it wasn't hard to do. So Reynold gave us a cover that turns out to be convincing in every way. Do you like his work?



CUSTOM CAL SAYS:

**Chevy owners, here's the newest  
CUSTOM CHEVROLET EQUIPMENT!**

**ORDER BY MAIL FROM EASTERN AUTO & "CUSTOMIZE" YOUR CAR**

### CHEVY WIRE LOOMS

Another Eastern Auto "Custom Accessory" **FIRST!** Never before have Chevy owners been able to add such style and class to their motor. This Wire Loom makes a more precision-looking job, yet it remains practical for the Chevrolet spark plug wires. It's chrome plated on steel tubing. Don't put up with that plain looking motor any longer, send for your Wire Loom today.....Only

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Bright red lacquered ignition wire—double insulation. Top quality, top appearance. Cut to length, including 8 brass distributor tips, ready for installation.....Yours for

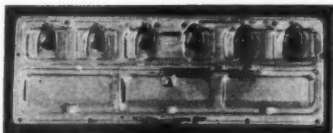
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### CHEVY VALVE COVER

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**\$7.95**



### CHEVY SIDEPLATE

If you're really interested in adding to the appearance of your Chevrolet then this is for you. A beauty that's chrome plated on steel. Fits 1937-51. Send for yours right now.

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(Specify if Powerglide).....

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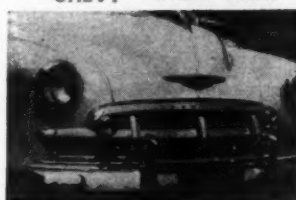


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You can give your Chevy that "expensive" look without spending much money. Eastern Auto's Grille Trim is beautifully chromed to a luster bright finish. Besides it's massive and makes your car look bigger.

For 1950 only.....

**\$13.95** set

25% deposit on all orders. Prices F.O.B. Los Angeles. Add 3% sales tax in Calif.



AS IT TURNS!  
Send for this NEW, BIG Catalog crammed with 100's of photos of latest "Custom accessories" for your car, plus parts for super motor performance and economy. Send into to cover tomorrow & postpaid.

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"CUSTOM ACCESSORIES"

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...by Almquist

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**\$27.50**

Extensions to Mufflers, pair.....\$8.50

### "BUILD-UR-OWN" HEADERS

**SAVE!** Kit includes three 180° Bends, Collector Tubes, Six Flanges & instructions for quick assembly. **HEADER KIT.....\$12.95**

### Balanced CUSTOM EXHAUST System

#### DESIGNED TO GIVE . . .

- More Power
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- Less Back Pressure
- Deep Throbbing Tone

Tests show up to 15% Horsepower increase!

Eliminates the back pressure caused by the stock exhaust system—thereby increasing engine efficiency & performance! Set includes: Pair of Almquist Headers, set of extensions from headers to mufflers, Two Hollywood Steel-Packed Mufflers, Left Side Tailpipe & Brackets.

#### EASY TO INSTALL

1935-52 Ford & Merc.....\$49.50  
Oldsmobile 88 & 98.....74.50  
1937-52 Chevrolet.....59.50  
Studebaker V-8's.....59.50  
(Any set without mufflers \$10 less)



### HOLLYWOOD Twin Tones



#### "Finest Steel-Packed Muffler"

#### DEEP MELLOW THROBBING PURR!

Improved Straight-Thru design—Stainless steel packing—Extra heavy shell—Longer lasting. Guaranteed Blow-out Proof! **For ALL CARS.....\$6.95**

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Ultra-Deep Rumbling Tone—Less back pressure! Complete with all pipes, Two Steel-pack Mufflers, Left Tailpipe, etc. For Fords & Mercs.....\$22.95  
For Olds & Stude V-8's.....35.00

### ORDER BY MAIL!

Please ship the following:

- Enclosed find \$..... ☐ Ship C.O.D.
- ☐ Set Exhaust Headers ☐ Hollywood Single Muffler
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Specify Car & Year.....

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**ALMQUIST**  
(dealers wanted)

ENGINEERING and manufacturing  
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## READER REFLECTIONS

### OPTIMISTIC STOPWATCH?

Gentlemen:

I enjoy your "Motor Trials" very much; think they give each car a fair going-over. However, just one thing I would like to know. Do your testing boys have arthritis of the right leg? For instance, in your last issue (Jan. '52) the '51 Olds Super 88 was tested. Your boy somehow managed to hold the car back to 15.75 seconds for 0-60 mph from low. This is fantastic. If I can't bring one of those same borges to 60 in less than 13.5 seconds, I'll hand in my driver's license! (And so would a lot of other guys!) If it was a synchromesh job, I would say they were just lazy, but with Hydra-Matic it is just downright ridiculous! These timing discrepancies are consistent in your trials.

Your man Borgeson also likes the Hydra-Matic transmission, which in my book is lousy. I'm a straight-shift man myself, but if I must have an automatic, I'll take a torque-converter any day. The mileage may be poorer, but the performance is much better.

Borgeson also states that the 3.9:1 Olds was the fastest "draggin'-wagon" that he has tested to date. This means that he has tested neither the '51 Chrysler V-8, nor the '49-'50-'51 Cadillac model 61. The Chrysler will do 0-60 in a bit less than 11 seconds, whereas the synchromesh Olds will only do it in 12 seconds. And the Caddie 61 synchromesh will make both the Olds and the Chrysler look sick in a drag race. (The terrific jump of the synchromesh, plus the fact that the Caddie weighs less than the big Chrysler account for this fact.) The Chrysler has about 0.9 mph top speed over the Caddie.)

I hope you publish this letter, as I would like to see what the reader reaction to it would be.

Gordon D. Thayer,  
Ithaca, N. Y.

Consistent discrepancies: acceleration times depend greatly upon when you punch the stopwatch—as soon as you hit the throttle or as soon as the car starts moving. Many cars are remarkably slow in getting rolling. Naturally, we punch the watch when we open the throttle.

Liking Hydra-Matic: In no MOTOR TREND "Motor Trial" has an automatic transmission ever been favored over manual type. We said, in the case of the Olds, "If you prefer an automatic transmission on your car, this is a good one." We have always taken a frankly dim view of automatic controls which add to purchase and maintenance cost, take the art out of driving.

Draggin'-wagon: 3.9:1 Olds referred to was 1950 model, as noted, and had standard transmission. Our acceleration figures are averages of four runs (two each way) and we strive for accuracy rather than spectacular figures. Here's how the 3.9:1 Olds stacked up against Chrysler and Hydra-Matic Cadillac:

	0-60 mph	Standing 1/4 mile
Olds	12.22	19.86
Chrysler	14.39	19.32
Cadillac	16.62	21.22

Although, as you say, the higher-geared Chrysler will take the 3.9 Olds in the Standing Quarter, in our tests, AVERAGE acceleration for 3.9 Olds for 32 different runs was 11.74 secs., 13.12 secs. for Chrysler—Editor

### AN INVITATION FOR MR. KUECHLE

Gentlemen:

From one reader to another, I extend to Mr. R. H. Kuechle, up in South Dakota (MT Jan. '52) an invitation to visit the '52 running of the Elkhart Lake Road Race. Mr. K is perturbed by the appearance of articles of foreign automa-

biles and "those so-called sports cars." As a spectator he would be witness to a very exciting event.

Americans have the tendency to bury their heads in the sand and spout forth a phrase such as "we got the best and nuts to the rest." While we indulge in this ostrich act, Detroit engineers will continue to turn out doughnut-tired, front-end-heavy, soft-sprung, ugly juggernauts with which to propel ourselves into the great beyond. Mr. K wants stock car racing. For a good part, foreign road racers are stock. On the other hand he says it is un-American because a page or two in every issue is devoted to foreign autos. MOTOR TREND is the magazine for a motoring world. It is 100% with me. "Classic Comments" and Eugene Jaderquist are prime.

J. A. Hewins

Hazel Park, Michigan

—Mr. Kuechle received many bids to Elkhart Lake's '52 race. He also has much support for his opinions. MOTOR TREND will give coverage, impartially, to both stocks and sports.—Editor

### CEILING PRICES ON CLASSICS

Gentlemen:

This is intended to be a plug for your "Sell-'N'-Swap" feature. My ad drew over twenty inquiries, two of which were long-distance calls. The car was sold by long-distance on the same night my copy arrived. The deal was a "false alarm," but another completed transaction took place by mail within two weeks. This service is a very reliable aid to your readers.

All of which brings up a point about buying and selling automobiles. Ceiling prices, I realize, do not apply to cars over 25 years old—but what's the legal ceiling on classics and odd models which are unaltered in design or equipment and listed under price regulations? Such examples from the "Sell-'N'-Swap" column are: 1931 Packard—\$450—1928 Cadillac Phaeton—\$500. Are these examples a violation of current price regulations? Or are car lovers zany enough to pay \$800 for a 1932 Cracked-head aircooled 12? Or is this too delicate a question to be published?

Sincerely,  
Roy Smoot  
Cincinnati, Ohio

—You've proposed a thorny question. Here's how we stand: MOTOR TREND does not police the advertisements in "Sell-'N'-Swap" because the price charged for insertion of an ad (\$1.00) is not enough to pay for the staff we'd need to do the job. Further, we figure that all our readers are big enough to take care of themselves and wouldn't appreciate our playing Big Brother.

The OPS says this: All cars over 25 years old are not controlled. Later automobiles, up to '40 vintage are governed by the published ceiling prices for '40 models. If you own a model that has no counterpart today, like a phaeton, you must apply to your local OPS office, automotive division, for a price. State the price the car sold for originally, its year, make, body style, model. If you've poured a lot of money into the car, enclose receipts for the amounts spent and that will be taken into consideration. If you have any further problems go straight to the horse's mouth for your information—the OPS.—Editor

### LINCOLN INACCURATE

Gentlemen:

Not that it makes much difference in the infinite scheme of things, but the Lincoln Brunn convertible victoria illustrated in the January (Continued on page nine)



**NEW! COLORFUL! BIG!**

**JUST OUT**

**AUTO ACCESSORIES COMPANY**

**SEND TODAY**

**10th EDITION price 50¢**

**MORE THAN 50 PAGES,  
OVER 1000 ITEMS FULLY INDEXED  
BIG CLEAR PHOTOS  
MAGAZINE SIZE COLOR PAGES**

**Gauges and Instruments**

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**Custom Interiors**

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**Exhaust Systems**

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**SPECIAL CATALOGUE AVAILABLE TO DEALERS**

**HEADQUARTERS FOR THE  
WORLD'S FINEST SPEED,  
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**The most modern automotive catalogue ever presented. Sections on Speed, Power, Gauges, Exhaust Systems, Custom Chrome, and many others, from the nation's leading manufacturers. The highest quality merchandise at the lowest prices.**

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**prevents "Engine Ulcers" caused by DRY STARTING**

**NOW! Upper Cylinder Lubrication That Resists "RED HOT" Temperatures**

Upper cylinder areas in today's engines operate under excessive heat because combustion chamber temperatures may reach 2,500°. Since ordinary oil breaks down at 550° or less, valves, rings and other parts may operate without lubrication. Result: Excessive wear . . . loss of power . . . eventual engine failure. Miracle Power used in the gas assures upper cylinder lubrication because it deposits colloidal synthetic graphite on vital surfaces. This special graphite lubricates effectively at temperatures higher than ever found in any automotive engine.

And in your oil, Miracle Power prevents DRY STARTING damage to other engine parts. That means smoother performance . . . and more power with less gas.

Try Miracle Power next time you get gas.

**Miracle Power Division  
THE AP PARTS CORPORATION  
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**Miracle Power**  
"Greatest Engine Guard in Existence"  
PUTS THE "PURR-R-R" IN ENGINE PERFORMANCE

At better service stations, garages and car dealers, or use this coupon for introductory offer.

**THE AP PARTS CORPORATION  
656 AP BUILDING, TOLEDO 1, OHIO**

Enclosed find \$.....for which please send me *postpaid*:  
..... trial cans of Miracle Power at 75c each (1 for gas, 1 for oil)  
Please send me free literature on making my car last longer.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**TREATS THE ENGINE—NOT THE OIL**

BE FIRST  
WITH  
**PORTER**

ALL  
MUFFLERS  
MADE WITH  
3/4 16 GAGE TUBING

STEEL PACK OR

HOLLYWOOD TYPE  
SINGLES FOR ALL CARS

### Ford and Mercury Duals

1935 to 1948	25.30
1949 to 1951	27.50

### Chevrolet Duals

1937-'51 (with exchange manifold), 48.00  
Refund of \$20.00 upon return of your manifold. No Chevrolet convertible duals.

### Plymouth and Dodge Duals

1942-'51 (with exchange manifold), 53.00  
Refund of \$20.00 upon return of your manifold. No Ply. or Dodge convert. duals.

### Studebaker V8 Duals

Standard transmission	33.00
Automatic transmission	33.00

### Oldsmobile Duals

#1-1949 to 1950 '88-98"	33.00
#2-1951 '88"	33.00
#3-1951 Super '88"	33.00
#4-1951 '98"	33.00

### Cadillac Duals

1949 to 1951	33.00
--------------	-------

All prices f.o.b. Los Angeles, California  
PLEASE SPECIFY YEAR AND MODEL

Dealerships Available

**Porter Muffler Mfg. Co., Inc.**  
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ppd.

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Box 7013, Los Angeles 37, California



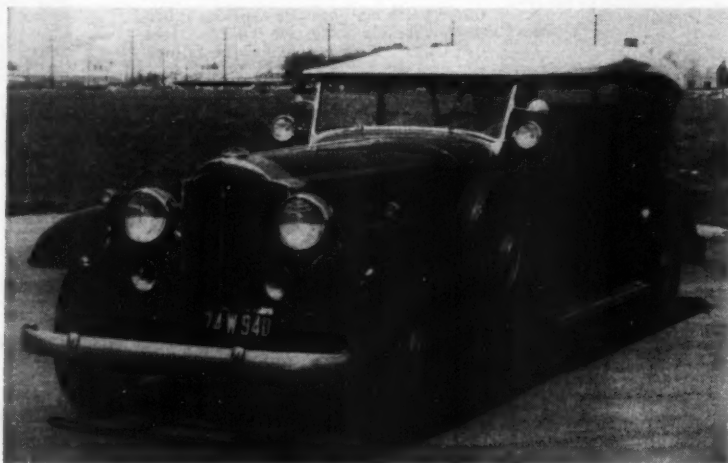
"This is a picture of an '06 White Steamer, Model F, as it is today. Maybe the steam car fans will remember the famous Whites." Arthur E. Twohy, Los Angeles

## RANDOM SHOTS

photos from our readers

"... This '37 Ford was built by Bill Abbott Body Shop in Abilene, Kansas. The frame is from a '40 Ford, and '48 Ford steering was used. A '40 Merc is the power plant. The body was a '37 Ford five-window coupe which has been channeled and chopped. Grille is '39 Buick with center section removed. Front fenders are '40 Ford, reshaped to match cowl. Colors are cream and red."

W. L. (Bill) Abbott  
Abilene, Kansas



"It was a difficult decision to make, but I had to sell my '33 Packard Super Eight phaeton. The car was truly original and had been completely restored." H. E. Stein, Norwalk, Calif.

## Reader Reflections

(Continued from page six)

issue (p.45) is a 1936 model and not a 1937 as indicated. In 1937 the headlights were placed in the fenders, according to my collection of catalogues and advertisements for Lincolns.

Sincerely,  
Robert Tuthill  
Springfield, Mass.

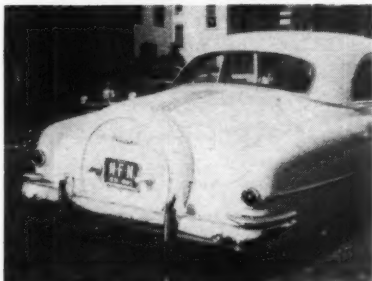
—Mr. Jaderquist has been locked in his cell with a full set of Lincoln catalogues. We're keeping him on a bread and water diet until he can quote chapter and verse on identification.—Editor

### PIN-MONEY CUSTOM

Gentlemen:

Being an eastern "foreigner" I rely very heavily on your magazine to keep me abreast of what is being done in the realm of customizing, restyling, etc. . . .

Such an avid interest as mine, as well as many others, cannot be restrained forever. (My



Pontiac coupe, '49, is beginning to evidence the fact that I am a steady reader of your periodicals.) The bit of restraint that was apparent was largely in the pocketbook, so late in the summer I decided to try my hand at a little restyling, or what-have-you. I progressed as far as the enclosed photos show before cold weather caught up with my efforts. I intend to pick up where I left off when the Spring comes.

I am happy with the results of my efforts thus far—a spare tire cover. Especially in view of the total cost of the project . . . nine hours of labor, and \$2.85 in cash! I purchased the shell from a local graveyard for \$.85 . . . the remainder of the cash outlay was for wire, molding, a small quantity of paint, and a piece of strap iron. The ornamentation was formerly on the deck itself.

Inspiration for this project was provided from photos in your Custom Cars . . . one of Dick Shoemaker's '50 Ford, and one of Bruce Lund's '49 Dodge roadster. Like the latter, my cover can be removed without leaving a tell-tale mark.

Thanks, once more, for a wonderful magazine, and for the inspiration that proved to me that not all this type of work is expensive custom tailoring which must be farmed out. Keep up the good work.

Norman F. Nickerson,  
Columbus, Ohio

### OLDS RATIOS

Gentlemen:

In the Jan. issue of MOTOR TREND, in your Olds Super 88 "Motor Trial," you printed in your specifications the axle ratio of the Hydra-Matic equipped 88 as 3.64, 3.9 optional. According to my Olds owner manual the ratio is 3.42 with no optional. Maybe you confused the ratio with those of synchromesh equipped 88s (3.64, 3.9 optional).

Dan Cornelius,  
Villa Park, Ill.

Reader Cornelius is correct. We took our figures from the "Rear Axle" section of the AMA spec, where rear axle ratios are normally listed. In the case of the Super 88, the ratio was listed under the Hydra-Matic transmission.—Ed.

March 1952

# STEP UP PEP UP!



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# Spotlight on Detroit as we go to press

**D**ETROIT, MICHIGAN—The work of months, and in some cases years, is culminating in auto dealer showrooms throughout the nation these days.

Now at last the closely held secrets of stylists and engineers are being laid bare and you may see for yourself whether improvements are as important as advertising executives proclaim.

Most of the car manufacturers currently are premiering their 1952 creations. A whopping total of 10 new offerings are competing for public attention. They are Lincoln, Mercury, Buick, Plymouth, Chevrolet, Hudson, Cadillac, Oldsmobile, Studebaker and the recently announced Willys passenger car.

Some of these jobs have really exciting engineering and styling features, others are mere face-lifted versions of last year's models. Here is a run-down on what you may expect to find when you look them over at your dealers.

As of press-time, information about the new Cadillac, Oldsmobile and Hudson had not been readied and made available, so MOTOR TREND will report on these in this column next month.



STYLISH NEW light car is Willys' "Aero Wing," has brand-new six-cyl. F-head 90 bhp engine. Gas mileage as high as 35 mpg is claimed, when using overdrive. Watch for Motor Trial soon

## LINCOLN FEATURES NEW ENGINE

After three and a half years of engineering and development research, Lincoln is unveiling its reportedly fabulous valve-in-head V-8 power plant.

A 160 bhp engine, it boasts such improvements, along with its new combustion chamber design, as a revamped ex-

haust manifold system, a new type cam contour, less complicated carburetor, precision-cast crankshaft, full-flow oil filter system, self-activated ventilation system, and redesigned fuel system.

Statistically, the engine has 317 cu. ins. displacement with a 7.5:1 compression ratio. Bore is 3.8 ins. and stroke is 3.5 ins.

Appearance-wise, the 1952 Lincoln is completely changed, and it introduces several unique engineering features in addition to the engine. Joseph Bayne, L-M sales manager, believes the car will set new design trends, and he points to the distinctive front end, with its new high bumper-grille, recessed headlight and functional hood as examples.

For the first time in an American car, Lincoln is equipped with clutch and brake pedals which are suspended from a bracket located between the dash and instrument panel; thus, eliminating holes in the floor and providing more foot room.

Among other features are a new frame, new front-wheel suspension, bigger shocks and brakes, 20 per cent more glass area, and a lighter battery.

## MERCURY STRESSES STYLING

Radically new body styling, stepped-up bhp and several mechanical changes characterize the 1952 Mercury line.

Originally, the firm planned to introduce an overhead valve V-8 also, but material and tooling problems sidetracked it for at least another year.

In fact, the distinctive simulated air scoop on the hood is directly attributable to this change in planning. According to Benson Ford, president of L-M, this styling device was incorporated after company engineers found that the hood would



NEW MERCURY has been radically re-designed, has shorter overall length, one-piece bumper-grille. Power plant is still L-head V-8, output is boosted to 125 bhp at 3700 rpm. Ratio: 7.5:1



LINCOLN COSMOPOLITAN is big news for '52. In addition to radical styling changes, engine is completely new. It has 317 cu. ins. displacement, bore and stroke of 3.8 x 3.5 ins., puts out 160 bhp



not close when the present engine was installed instead of the ohv job, due to the location of the air cleaner.

The 1952 Mercury is shorter in overall body length, narrower in outside dimensions and slightly lower in height. One of its noticeable exterior features is a one-piece grille and bumper.

As in the Lincoln, brake and clutch pedals are suspended from a bracket on the firewall, and the master brake cylinder is mounted on the dash panel. Also new is a ladder-type frame.

Numerous refinements have boosted the engine power to 125 bhp at 3700 rpm. Compression ratio is up to 7.2:1. Displacement is 255.4 cu. in. Bore is  $3\frac{3}{16}$  and stroke 4 ins.

#### BUICK HAS NEW CARBURETOR AND STEERING

With only slight changes from a style standpoint, Buick is heralding a new four-throated carburetor and power steering on its big Roadmaster series, the latter unit being optional equipment.

This carburetor, together with new manifold and an increase in compression ratio to 7.5:1, boosts output of the 320 cu. in. engine to 170 bhp.

Twelve years in development, the new carburetor has four barrels instead of two, and is designed to increase the power output of the engine at high speeds. Actually, it consists of two concentric bowl-type carburetors built into a single unit.

The primary carburetor operates at all times and is complete in itself. The secondary unit cuts in when the throttle reaches the halfway open mark. Both operate on a single control.

Buick's optional power steering consists of a conventional recirculating ball nut steering gear combined with a hydraulic booster linked to the Pitman shaft through a separate set of gears and controlled by a valve built into the steering gear. Hydraulic power is obtained from a pump driven by a belt off the crankshaft.

The system is actuated when four or more pounds of pressure are applied to the steering wheel. When pressure is released the wheels return to a straight position as in manually operated steering.

Stylewise, all Buick lines—Roadmaster, Super and Special—feature new grilles, fender ornaments, moldings and slight interior modifications. Both the Super and Special series are powered by the F-263 engine which develops 128 bhp in Dynaflo trim.

#### PLYMOUTH CLAIMS 46 ADVANCES

A long list of refinements is claimed by Plymouth, none of which constitutes a major advancement, however. Among the 46 improvements listed are changes in the engine, brakes, the electrical system, chassis, and exterior and interior trim.

(Continued on page thirty-four)

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## Your Editor Says . . . SAFETY AND STOCK CARS

**T**HERE ARE FEW enough places in the world today where we can go and still feel safe. And when it comes to the point that we no longer feel safe on the highway, it's high time that something is done about it!

We're not trying to take the high-and-mighty attitude that up to now nothing has been done to make driving safer and that all of a sudden we've arrived on the scene with the answer. That's as ridiculous as some of the "cure-all" cigarette advertisements now gracing national magazines and billboards. But it seems to us that a lot more effort on the part of all people even remotely concerned with rolling stock could bring more conclusive results than we've had up to now.

Highway improvements, we sincerely hope, will come as speeds increase. Over a period of the past few years this has not necessarily been true, but the fact that highway maintenance is dependent on so many different agencies makes it a monumental task to improve *all* highways throughout the country at the same time. However, a steady stream of complaints from drivers reporting inadequate and unsafe road conditions to local authorities are bound to have their effect.

Proper traffic enforcement, with the

emphasis on patrolling, education and stern sentences, seems to be one of the most important factors in reducing traffic fatalities. A good example of this happened during the Christmas holidays in the Los Angeles area. Here, local police were constantly on the prowl, which tended to slow traffic down considerably. Road blocks were thrown up at various unannounced points throughout the area at specific times. The police would then check both the condition of each stopped driver and his vehicle. Drunken drivers were carted off to jail, while drivers of cars with faulty brakes, inadequate lights, or other unsafe conditions were issued citations with stern warnings to take care of them immediately. As a result, traffic fatalities over a four-day period were limited to three (an average of 0.7 per day), whereas last year's *three-day* toll was seven (2.3 per day).

Through the efforts of organizations, such as the American Automobile Association, it is possible that many automotive safety features can be adopted. Recently we were fortunate enough to sit in on a national AAA meeting in Chicago where a discussion of stock car safety came up. It appeared, from comments voiced at the meeting, that the AAA looks

on stock car racing as a method of helping to improve the breed. There are, however, two schools of thought.

One school of thought is that stock cars should be raced *absolutely stock*; the other is that safety modifications should be made before the cars are allowed to race. The reasoning behind the first viewpoint is that if a car is altered from the original, automotive manufacturers will not pay attention to these safety changes because they were made *for racing*. The second viewpoint is taken because if safety changes are *not* made and components fail during an event, the manufacturer will find it necessary to make improvements to forestall the possibility of the same type of failure in ordinary driving.

We take the attitude that the closer stock cars are to stock the more will be learned from their performance. Of course, safety precautions such as safety belts, welded-in seats, safety-rim wheels, additional shock absorbers, etc., should be made in any car that races to make it as safe as possible for both driver and spectators. Manufacturers can still learn much from their performance. Cars can and **MUST** be built safer.

—Walter A. Woron

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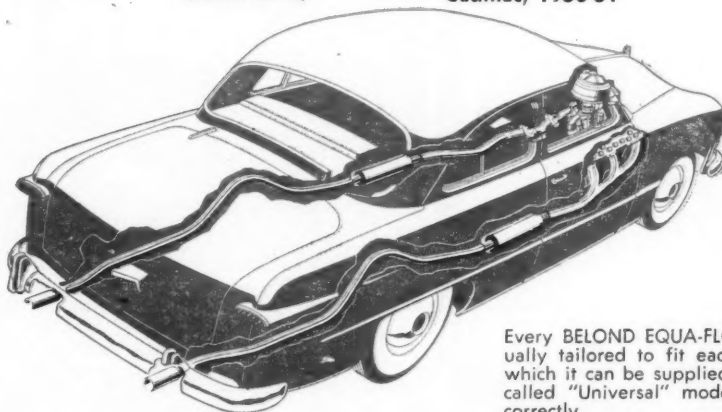
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March 1952

Thirteen







## MOTOR TRIAL



# '52 STUDEBAKER COMMANDER

By Walt Woron

PHOTOS BY CARL TUVESON, STUDEBAKER

AS I LEFT the semi-tropical climate of Southern California, flying eastward toward the chilly snows of the Midwest, I began to wonder how much effect the weather would have on the performance of the '52 Studebaker I was to test. Much to my *personal* discomfort, I was soon to find out, for when I arrived at the Studebaker Proving Grounds (in South Bend, Ind.) the temperature had nosedived to 28°F., with the air crisp, but clear.

As it turned out, the Studebaker Commander V-8 performed every bit as good, and slightly better (in some respects) than last year's car. The reason for some of the improved performance was that the last Studebaker "Motor Trial" (June '51 MOTOR TREND) was done with a Commander equipped with Automatic Drive; this year's test was made with a Commander equipped with standard transmission and overdrive. (A test of the '52 V-8 fitted with the *same* drive system would have proved little, since last year's model and this year's car have basically the same engine and drive train.

If you recall last year's "Motor Trial," you'll remember that we predicted that "the Studebaker Corporation should be able to sell all the V-8s they can build." After having pounded the car for three consecutive days, that prediction was easy to make—happily (for Studebaker) it came true. It wasn't their best year, be-

**CLEANER STYLING, MECHANICAL REFINEMENTS,  
GUARANTEE THE FINE NEW STUDE V-8, A  
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cause production was limited, but it was their *second* best year. It's not hard to see that this year's car should meet with even greater approval. Improvements, engineering- and style-wise, have made the Studebaker V-8 an even better car.

### Standard Transmission Is Faster

The Studebaker V-8 still isn't the fastest go-job of stock American cars, but it is among the top five. As shown in the chart with the MOTOR TREND Engineering Award (Feb. '51) the Stude with Automatic Drive was fifth fastest in average acceleration, fourth fastest in the standing ¼ mile.

The car I had at the proving grounds would have held fourth in both categories. This could be used to strengthen the argument that speed-shifting a conventional gearbox is faster than letting a fluid coupling do the shifting for you (with which I'm inclined to agree); on the other hand, different rear axle ratios are used in each case—standard with overdrive is 4.55:1, automatic is 3.54:1. Since a lower gear normally gives you more acceleration, this is probably the reason for the added oomph.

All acceleration checks through the gears were made by speed-shifting, with

(Continued on next page)



SECOND DAY of Motor Trial was made after a four-in. snowfall had blanketed the ground



CAR ON 40 per cent slope shows amount of give in springs and shocks, tire deflection



TO INDICATE body lean and to see if Stude in this position would cause tires to rub on fenders, steering was cramped hard over, gearshift placed in low, full throttle used

all possible combinations being used: revving up to 2000 rpm, popping the clutch and letting the rear wheels spin; revving up to 2000 rpm, popping the clutch to only where it would take hold so as not to spin the wheels; shifting to second at 25-35 mph; shifting to third at 50-60 mph; and, trading the driving job between J. H. ("Mac") McIntyre, Experimental Engineer, and myself. You can see why we're sure that we got the best performance out of the car. The right combination for this machine was to spin the rear wheels, shift to second at 32 mph and to third at 58 mph. After we hit on this, we were able to do the  $\frac{1}{4}$  mile at an average of :20.49 and were hitting from 67 to 70 mph at the end of the  $\frac{1}{4}$  mile.

#### "Automatic Drive" Optional

There's not much to say about the standard transmission except that with overdrive and a 4.55:1 rear axle, you're pulling a 3.19 gear, which makes a good high-speed cruising gear. Standard gear ratio without overdrive is 4.10:1. Automatic Drive provides you with two forward speed ranges (LOW and DRIVE) and a reverse, with all normal driving in DRIVE position.

#### Steering Is Good

The center-point steering system of the Studebaker is a peculiar combination of good, responsive control, a fairly fast ratio, too many turns from lock-to-lock (six), no understeer nor oversteer, and no wandering tendencies. When you slam into a corner at 65-75 mph the body leans considerably, but you don't have to fight against mushiness—control is easy, even though the wheel does not return itself.

Later on I had the opportunity to ask some of the engineers why the body leaned as it did on corners, and if customers had found it objectionable. "What you like about the way it steers and object to in lean is due to the spring rate and positioning of the front shocks, giving what we believe to be the best compromise be-

tween cornering stability and ride. The front end uses an anti-sway bar and we recommend to owners who'll drive in mountainous country that they equip their cars with a rear anti-sway bar (optional on Commanders). Do you think that our car leans any more than other cars and that the public objects to the amount of lean, or to the rate of lean?"

My reply was that I thought their car does lean more than some cars but that the second part of the question stumped me. I'd like to hear from our readers on this score: Do you care how much a car body leans over, providing it approaches that angle gradually, or would you rather sacrifice some softness in ride to keep the car as level as possible around corners?

My next comment was that they had achieved a good balance between comfort and stability, except on an "ocean-wave" road where the car had some tendency to pitch. Engineering's answer: "We feel that the pitching motion is less than most cars (which I concur with). This, again, is a compromise of ride and stability."

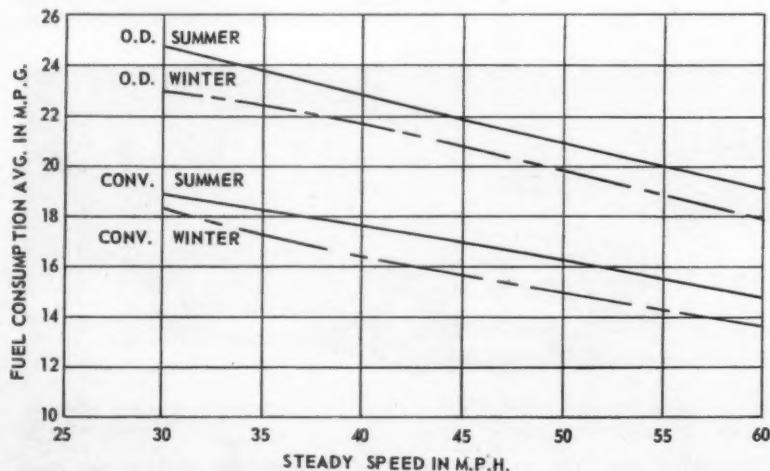
#### Fuel Economy Lowered by Cold

In all previous "Motor Trials" performed on the West Coast, the temperature has seldom, if ever, dipped below 50°F. At the Studebaker Proving Grounds, the fuel consumption checks were made in crisp, clear weather, with the temperature varying between 27.5° and 34°F. (For the difference this makes in fuel economy, see the accompanying chart which shows our tests and those conducted by Studebaker test engineers this summer in 67°F temperature.) Even so, fuel consumption averages were good, but not, unexplainably, as good as those we obtained last year with Automatic Drive.

Two things were against us in getting fuel consumption checks in traffic: all tests had to be performed on the proving grounds because it was prior to car announcement time; the second day of my stay in South Bend it began to snow, and it snowed all week long. In order to get you the quickest report possible, we had to go to press without this information, but we will publish it as soon as possible.

#### Storming Up Hills

Both as a test of the Studebaker's hill-climbing ability and as a check of the hill-holder, I took the car up a concrete-surfaced, 30 per cent grade. Half-way up I stopped the car, pushed in the clutch pedal, switched the ignition off, took it out of gear, and took my foot off the brake. The car stayed right there, the hill-holder having securely locked the brakes. I then started the car again, placed it in low, pushed in the clutch pedal, revved the engine and slowly let the clutch out. The rear wheels slipped on some loose gravel on



DIFFERENCE in fuel consumption using overdrive and conventional, both winter and summer, are indicated in mpg and steady mph

the hill, smoking rubber before we got traction, but we plowed right on up the steep grade. If you apply enough pressure to the throttle to overcome the inertia of the car on the slant, then ease out the clutch to release the hill-holder, you'll have no difficulty starting on the severest slope.

#### Brake Improvements Made

Brakes on the Studebaker Commander are adequate, with improvements on this year's model giving us better stopping distances than we got last year. The one objection we had on the '51 car—brake fade—has been reduced to a great degree. When I brought up the subject of brake fade to Harold Churchill, Director of Research, his reply was, "We have new lining now and a trailing reverse shoe (no return spring) which gives the effect of a self-adjusting shoe and compensates for expansion due to heat. This helps to reduce the fade. We've also changed the ratio of connecting arms to give the same braking effect with less pedal pressure." Continuing research on brakes—drum cooling, possibly power braking—is now going on at Studebaker.

The parking brake is just that—as an emergency brake I doubt if it would be sufficient, since several times with the parking brake lever all the way out we were able to start from a standstill, using no noticeable engine effort. If it actually was designed to be an emergency brake, it should be moved further to the right, where the front seat passenger could also reach it, if necessary. This emergency brake problem is one common to almost all production cars.

#### Top Speed, 97.85 Mph

It was fortunate that we completed the majority of the tests on the first day, for on the second day it began to snow. We had left the top speed runs and chassis dynamometer checks for the last—but a run around the three-mile, banked track at 50 mph convinced us that no top speed runs could be made on *that* glazed surface. An attempt to keep from slipping and sliding on the snow-packed, icy asphalt, and a crack at climbing a gravel-surfaced 28 per cent grade packed with four inches of snow convinced us the test was through.

What we did then was to compute the top speed from many acceleration graphs made on test Studebakers, all overdrive-equipped. Plotted on these graphs were the acceleration curves up to 80 mph. From these curves we extrapolated the top speed figures, both for third gear and overdrive, then averaged these up (a total of eight was used). Where there was any doubt, we used the low side. Average speed in third was 87.57 mph; average in overdrive, 97.85 mph. I don't believe these figures are at all out of line, for on the

clear day I had the car up to 90 mph on the backstretch of the track and there was still plenty of throttle left. Then, too, the '51 Stude with Automatic Drive and a 3.54 axle did 92.78 mph. It's safe to assume that the same car with overdrive, giving it a *higher* gear of 3.19 *should* go faster.

#### Engine Is Well Designed

Few stock cars on the road today can match Studebaker's fine V-8 engine. Although it winds up fairly tight (4000 rpm) to achieve its bhp of 120, its piston speed is well below the theoretical "top reliability" limit of 2500 fpm. Bhp/cu. in. (.516) is one of the highest in the industry. It is easy to see that many man-hours of research went into the development of this overhead valve V-8, including toying with overhead cam designs. Studebaker Engineering explained that although this type of system would be desirable, the cost and production problems in mass-produced engines make its use highly unlikely.

As far as higher compression ratios and output are concerned, Engineering went on to explain, experimental pistons are available that come up flush with the top of the cylinder, which in conjunction with 7.5:1 heads, give a compression ratio of 9:1 with a proportionate rise in bhp. Domed pistons of the same type will take the compression ratio up to approximately 14:1. These types of pistons can conceivably be made available for production whenever higher octane fuels also become available.

Topside improvements in the accessible and conveniently arranged engine include: an internal vent carburetor (to prevent dirt from entering the engine); relocation of the choke stove from the exhaust manifold (where it picked up dirt) to the in-

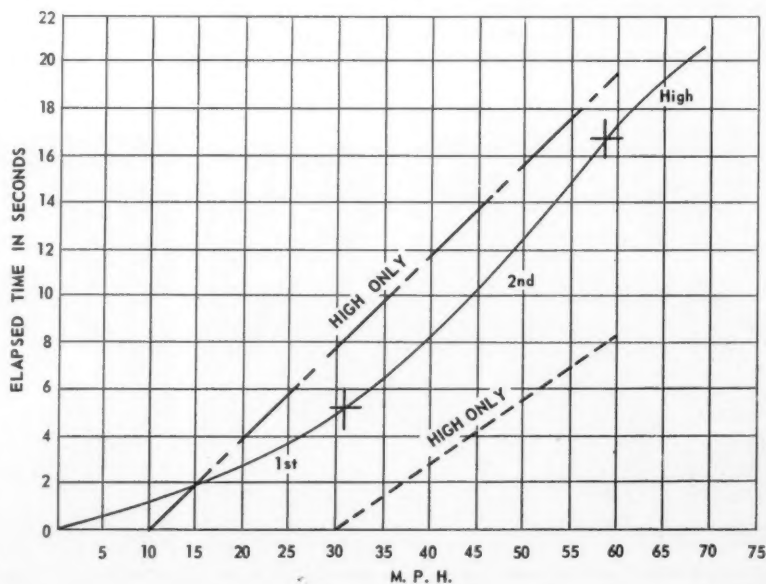
(Continued on page thirty-six)



WORON STORMS Studebaker around three-mile Stude track. Calculated top speed: 97.85 mph



LAST YEAR we complained about starter and hood latch both being identical T-handles on automatic transmission-equipped cars. This year Stude changed to pushbutton starter



CURVES SHOWING acceleration in high only and in all gears are indicated in elapsed time against mph. Crossmarks indicate shift points



# TRENDS in CUSTOMS

We asked the experts what they would be building in 1952. Their predictions indicate that a turning point has been reached in customizing

**F**ROM THE FAMOUS custom shops, from the small town local garages, from backyards all over the United States, will come the most revolutionary custom cars ever put on the highways—that's my prediction for 1952. These cars will be as radical mechanically as they are in styling, for these two factors affect each other. And you can be sure that the 1952 custom cars will have an immeasurable influence on Detroit in the years to come. This will be an interesting year in automobile development.

There are several major reasons why both the professional and amateur custom car builder will evolve radical cars this year. The strangest reason is the most important: "Nobody has any money!" Yes, everywhere I went gathering material for this story, I heard that phrase; yet this very shortage of money is going to result in more radical customs! How? Like this: customer comes to custom shop. Wants his stock model car customized, but can't spend the money he would ordinarily. Result: he and customizer sit down and rack their brains for new techniques, new materials, new ideas to do a custom job for less money. End product: a radically different custom car.

Another reason—the government has frozen production car design changes after the 1952 models. Result: the owner of a 1952 car will turn to customizing in order to own what would have been a new 1953.

By George Finneran

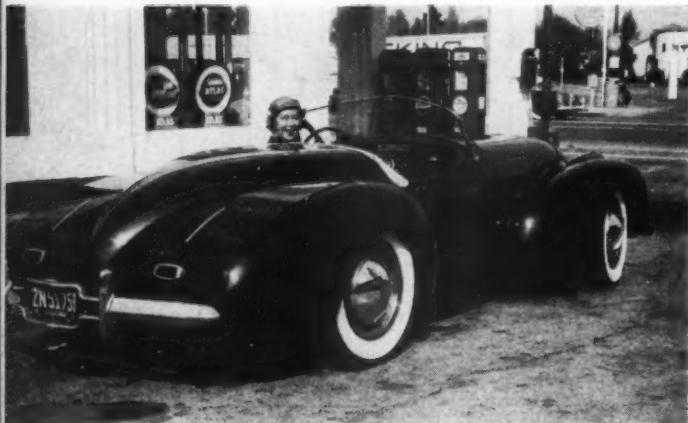
There will be fewer 1952 cars made, because of the war. Result: owners of 1950-1951 model cars, unable to buy a new car, will customize. Still another reason: certain metals and materials will be scarce, because of the war again. Result: new materials will be used for creating a custom car. Chrome, for instance, will be replaced by other types of plating and by other materials such as plastics, wood, maybe cloth. End product in each case: radical custom cars—and more of them. Still another reason is American interest in European styling, particularly the Italian designs. American custom car enthusiasts are finding many things in foreign concepts that make sense, and also save money. These, then, are the reasons for a radical trend. And here—are the trends . . .

During 1952, there will be two opposite schools of customizing in charge of production. One is called the Radical, the other, naturally, the Conservative. Let's go into Radical first. This is the from-the-ground-up school. George Barris is enrolled here, and so are the Ayalas, Plemmons & Lindley, Coachcraft of course, and most of the custom shops to some degree. From-the-ground-up means just what it says: Radical cars will be built on a chassis of the owner's choice, either of Detroit or foreign manufacture or one designed and built by an individual. This will be a

true custom car. The trend here is new: the car's components will be stock. For instance: rear fenders from one car, front fenders from another, deck from one, hood from another. Grilles, for the most part, will be custom-designed for the car. So will tops, either convertible or hard. The dash may be a stock component or a custom. The interior will be custom.

All Radical cars will be either functional sports cars, or sports-model cars (non-functional in a competition sense). A few non-sports cars will be built in this category for extremely wealthy people. I expect to see at least 20 or 30 custom-built formal cars built during the next year, and at least that number of completely custom-built cars which will be neither formal nor sports type. These will be, perhaps, sedans and coupes strongly influenced by foreign design built on American chassis for individualists with enough money to satisfy their demands for this compromise car.

I think the biggest number of Radical cars will be privately built. These "backyard specials" are the biggest result of this search for a completely different car produced for very little money. Proof? The rash of "Build it Yourself" articles in national auto and handicraft magazines during the past few months. We ran one here, the \$700-plus-labor Hudson by Martz. From the looks of things, we will be running many more of these projects—and all of them devoted to the same theme.



ALTHOUGH THIS car was built more than ten years ago, it anticipated one of the radical developments forecast for this year—the sport-custom

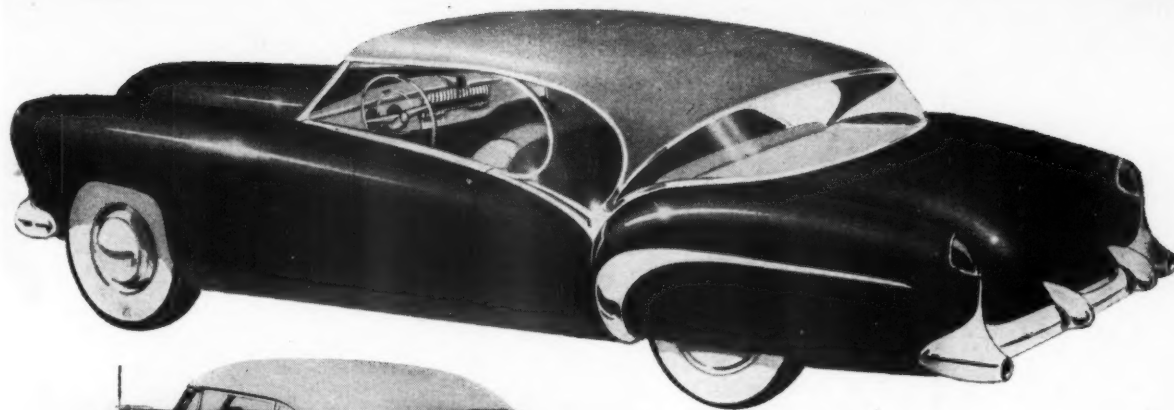
Eighteen



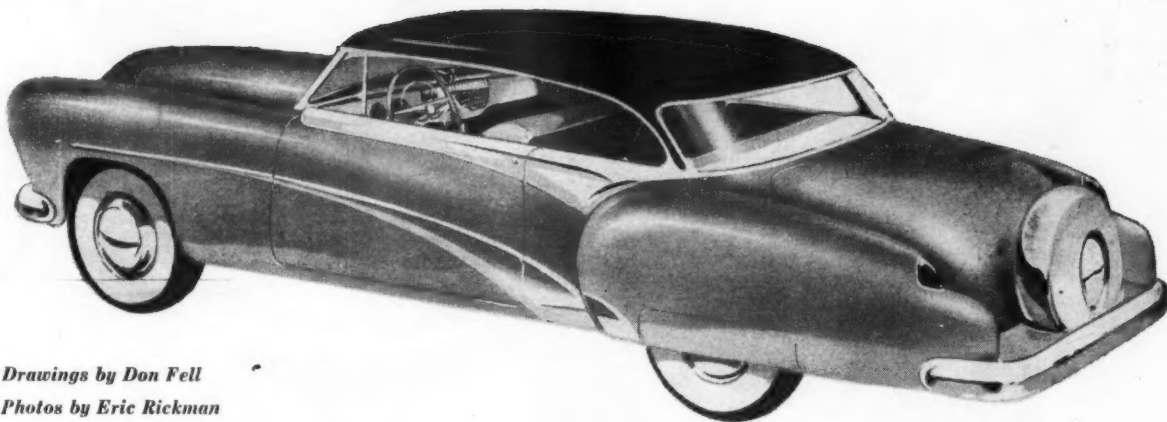
GEORGE BARRIS designs a new grille for a Muntz Jet. Oversize headlights were ordered by the customer. Upholstery will be lizard skin

Motor Trend





THE STOCK Chevrolet Bel-Air (opposite) as it would be customized by Gil (top) and Al Ayala (below). Both cars would be termed Conservative, despite their radical appearance, because of traditional, tested construction techniques



Drawings by Don Fell

Photos by Eric Rickman

"How to do it for even less money." Some will be good designs, some will not. But they will all be radical in their approach to the problem of the custom car.

Most of the developments in new materials and techniques will take place within the Radical school. Fiberglass, wood laminates, even fabric, as well as the conventional metals, will be used to construct sports and sports-model cars. The war can be counted upon to force developments in new materials because metals will be scarce. New techniques will develop as a result of the use of new materials and also in efforts to conserve metals and keep costs down. For instance: Vince Gardner, former Studebaker designer, creator of the Gardner Studebaker (*MOTOR TREND* Jan. 1950), winner of our Anglia Design Contest, is planning the production of a Fiberglass sports car body which can be placed

on a popular chassis of your choice for less than \$1000. The new feature here is that you will have a *choice* of two body styles and at least four different fender designs and grilles. When you get tired of your first style, just roll it back into the shop, have differently styled fenders and grille installed for a modest sum (Vince's guess: \$200), add new paint and interior, and presto! A new car! (Also see our April story on the new Wilro car.)

Both Barris and Plemmons & Lindley are working on this from-the-ground-up-but-stock-components technique. Barris has a Ford chassis in the works which will use body parts from four different cars with *minimum* modification. This technique requires a lot of time at the sketching board. You use stock body panels, fenders, etc., in order to keep costs down; modifying them to fit costs money

and thus defeats your purpose. Consequently, the stock pieces must be selected with care. Plemmons & Lindley in Compton, California, have a car in the works which will soon appear in our pages exclusively. It is one of the most interesting cars to come out of a California custom shop. The list of components will make your head swim: '51 Kaiser front fenders; '51 Ford hood; '50 Chev Bel-Air top and dash; '42 Ford deck and rear fenders; '50 Buick doors, sectioned; '50 Olds Holiday one-piece windshield; a floating grille made from '51 Frazer, '47 Cad bumper and grille pieces; and the whole works sits on a '42 Ford frame, V-8 60 providing the propulsion. I think it's one of the prettiest designs of the year and I'm sure you'll agree when you see our pictures in a future issue.

(Continued on page forty-two)

# Saving



Illustration by Wilson Cutler

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# Tax Dollars

## In 1951, Did You . . . Buy a Car? Buy Gasoline? Drive to Keep a Dental Date! If You Did Here Are Some Money-in-the-Pocket Ideas to Use in Your Income Tax Return

By Eugene Jaderquist

**Y**OUR BOSS called you about nine months ago. It was in the evening and you were home, nailed to your chair in front of the television set.

"Got some work for you," the boss said. "Want to come over here and get it right now?"

You didn't want to, but you went. The trip over to the house of your employer didn't take more than a half hour in your car, anyway. You probably never gave a thought to the fact that each mile clicked off by the odometer was a tiny deduction from your gross 1951 income. Too few people think of income tax from one March 15 to the next.

That trip to see the boss was a business trip. In the eyes of the Collector of Internal Revenue, business trips are part of your job and, as such, are ordinary and necessary expenses. If you drove 30 miles, you are entitled to a deduction of about \$2.00, depending on just how much it actually costs you to operate your car. If you paid any bridge or freeway tolls on the way, those items are also in your favor.

Income-tax laws are complex and many in number. Business firms and the few individuals who make whopping sums of money always hire an expert to prepare their returns for them. Bitter experience has taught them that the fee paid to the expert is more than compensated for by the money saved through his detailed knowledge of just such deductions as that trip to the boss. For you and me, however, the savings would be too small.

Fortunately, our problems are not as complex as those of the rich. With less money to spend, our way of life is simpler and our expenses less erratic and more regular. With just a little effort we can keep track of all the deductible items for which we spend part of our incomes.

Let's assume that you drive 10,000 miles every year. Most of that is for pleasure. As the Collector defines pleasure, it means that those miles were not run off while you were engaged in the pursuit of profit. Trips to the store, school, vacation resort, bank, and such places where you transact social and personal affairs are incidental to your occupation. So is commuting, according to the government. You bear the cost of the automobile during those jaunts.

While you're driving, however, you consume gasoline and there is a tax on gasoline. That tax may be deducted if your state law specifies that the tax is on the consumer. So may sales tax on oil, parts, tires, batteries and other accessories. And also deductible is the tax you pay when you buy your car—the sales tax only. The recent Federal tax is applied to the manufacturer, not you. You pay it, of course, but to the manu-

facturer and not the government. Only taxes paid to the government directly by you may be deducted.

When you're buying a car, there are two more deductions that may apply to you. Suppose you pay a third down and arrange for monthly payments to cover the balance. There is interest on the loan and that interest is deductible **PROVIDING IT IS ASCERTAINABLE IN THE CONTRACT**. If, however, the extra charge is called "time price differential" or "carrying charge" you cannot safely deduct that amount for income-tax purposes, because it is not legally defined as interest. Some have held that if the company which sells you the car later breaks down the "time price differential" figure and shows the amount of interest on its books, you may make the deduction, but that is not universally accepted. To be on the safe side, you should insist that your contract specify that some certain amount is interest.

If you take out insurance at the same time you buy the car, you may want one of the policies that pays the hospital bills in the event you are involved in an accident. The premium on that policy is deductible because it is classified as a medical expense. Premiums on collision and liability insurance are not deductible, which is rather inconsistent because the damage you sustain in an accident is. In case you have no insurance and find yourself involved in a major quarrel with a bigger car, you may deduct every cent of the damage on the appropriate line in your next income tax return unless the accident was intentional or you were drunk. But you probably do have insurance so all you are permitted to subtract is the amount the insurance payment does not cover.

### Business Deductions

Almost everything you do during business hours that is directly connected with your occupation is done for profit. That includes driving your car. If you make a trip to the bank to deposit company funds; if you travel across town to see a client; if you go to the wholesalers to pick up merchandise or return it; anything of that nature is a business expense and therefore deductible from your gross income.

To figure out the extent of the deduction, find out how many miles you drove for pleasure and how many for business in the same car. Then calculate the percent of time the car was used for business. Suppose 5,000 of a total of 10,000 miles was business mileage. Half of the total expense of your automobile would be a deductible item.

In case you only drive a few miles per year on business, cal-

*(Continued on page thirty-two)*



# MEXICAN road race

an outstanding contender in the second carrera panamericana brings you a behind-the-wheel message about the race, what it means, and what the future may hold for it

BY TROY RUTTMAN

photos by eric rickman



HERE WE are, taking off on the last leg, from Chihuahua City to the finish line at Juarez. Our time of 2h13:52 put us in 14th place for that leg but good average time made us fourth fastest in the entire race

**I**N A WAY, I hate to say it, but I still believe it's true: even next year—given somewhat modified regulations—the Carrera Panamericana can outshine our great classic, the 500 at the Indianapolis Speedway! Road racing is the greatest in just about every way. It's the ideal test of drivers and cars under real-life conditions, focused and concentrated by the struggle to be the first to pick up the purse at the highway's end.

And the people love it. What other sort of speed event could be headline news in every paper in the country—could actually turn almost every member of the entire population of a country into a fascinated spectator, as has happened two years running in Mexico? Production car road racing has a great future and I'll say more about that future toward the end of this story.

## Horsepower Won the Race

The Second Panamerican Road Race was won on the straightaways. Many people overestimate the importance of cornering ability in a long race such as

this. Gaining time is the way you win a race and you can gain twice as much time on the straightaway as you can over twisting roads. Look at it this way: the best you can hope to do in the mountains is to better your fellow contender's time by perhaps three mph. But get out on the straightaway and, if the other car has a top speed of 115 and you have 125, you can use every bit of that advantage and lop off the seconds and minutes at an amazing rate.

The Ferraris were superb cars in every way. The Italian drivers knew that they had even Bettenhausen's Chrysler topped for speed. And so, carrying just two spares, they nursed their rubber through the mountains, not pressing their cars at all. As it was, during the first twisting legs of the race, the Italians' famed Pirelli tires were a great disappointment and they were forced to switch to Mexican Goodrich-Euzkadis. Over the 81-mile leg from Puebla to Mexico City, which consists pretty much of an endless series of hairpin turns, I led Ascari all the way—until we reached the four-mile straight

before the finish line. Then the Ferrari came alongside in fourth gear, the driver gave me a friendly wave, dropped into fifth and reached the line a half-mile ahead of our Mercury. The Italians played a definitely cautious game in the mountains, knowing that seconds gained at the expense of tire wear could be turned into minutes gobbled up on the straightaway.



CLAY SMITH put the steam and reliability into our used Merc. His ideas on road racing technique were as good as they were unexpected

## Notable Cars

The performance of the Ferraris must be seen to be believed—even then it's hard to take. They have huge brakes, low center of gravity, light weight, small frontal area, and an engine that's a masterpiece of efficiency. Their engineering excellence is so foreign to our own experience that several drivers accused the Italians of using doped fuel—they couldn't believe that a mere 152 cu. ins. could develop so much pressure.

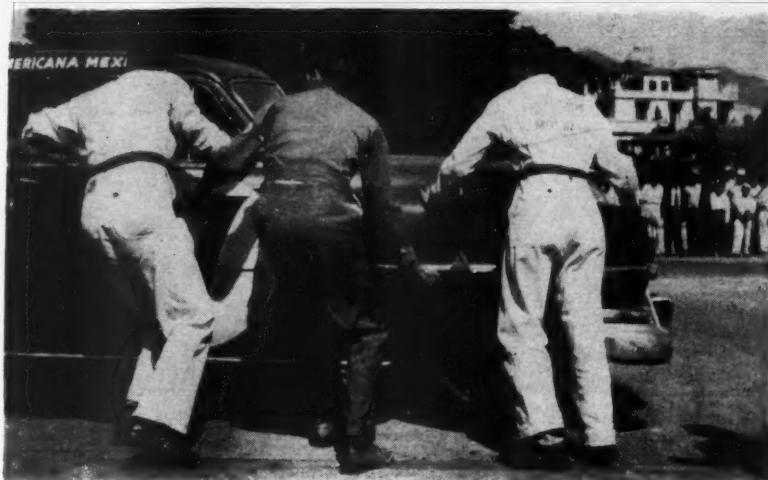
Almost as astonishing as the Ferraris was the performance of the little 122 cu. in. V-6 Lancias. It was a shock for Marshall Teague, booming along in his Hudson Hornet at 115 mph, to have a Lancia steam right by him. Bad luck dogged the Lancia cars and robbed us of a good demonstration of their abilities.

A big argument that's been hurled at the Ferraris is that they cost an awful lot of money—the guesses run as high as \$17,000—and that therefore they shouldn't be allowed to compete with our own very low-priced cars. Kiekhaefer's Chryslers—Tony Bettenhausen drove one—were much-modified cars, represented an investment of \$59,000, and were fairly typical of many of the highly tuned jobs in the race. Luigi Chinetti, Ferrari's New York agent, tells me that you can buy the mate to the Mexican Road Race car for under \$11,000, delivered in this country.

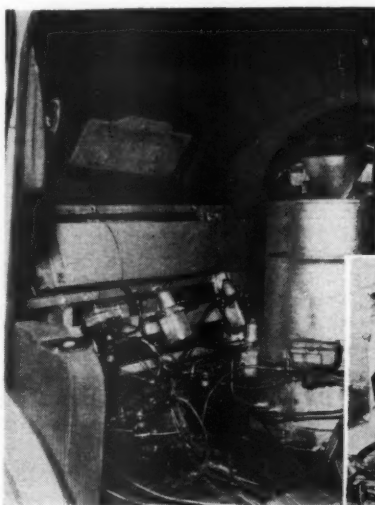
Everyone seems to be interested in the fact that the car that Clay Smith and I ran to fourth place in the race was probably the cheapest car entered. Here's the story: we bought the '48 Merc on a used car lot for \$1000. Clay went through the car with scientific thoroughness, had all critical parts magnafluxed and replaced those that showed up defective. He bored the block  $\frac{3}{8}$  in., added Edelbrock heads. Edmunds two-carb manifold, split exhaust headers, increased the oil capacity by one quart and installed a new radiator core. He installed a Kong distributor, mainly because it's available with manual spark control and Clay figured that would be useful with low-octane gas and widely varying altitudes. Naturally, he was right. He reworked the springs, added another four shock absorbers, put vents in the backing plates of the brakes. Total investment: \$2500. Top speed: 115 mph. Handling qualities: of the best. We got our specially prepared shocks from Car Controls in Los Angeles. They also supplied us with a Gyro Skid Control: the same sort of rig that I ran at Indianapolis. This "anti-sway bar" contributed a lot to our car's unusual stability.

It's very hard to say which was the most impressive American car in the race. Of those which used all stock parts—factory-listed equipment, that is—Marshall Teague's Hudson Hornet really had it; it was definitely the fastest U.S.

(Continued on next page)



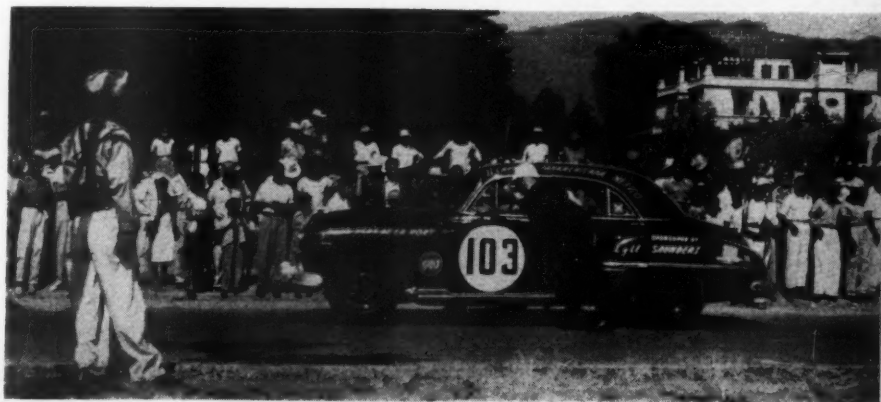
THE BRAKES on Bettenhausen's Chrysler had faded to nothing in the mountains. As he rolled into Oaxaca, he kept bumping the curb with his left front wheel, to slow him down. Here, some of the pit boys are applying the flying tackle that it took to bring Tony's car to a standstill



THE INSIDE of Mejia's car (left) was just as impressive. In this small detail is shown the huge drum for spare water, two Stewart-Warner pumps, three filters and three Autopulses for transferring various reserves of vital juice



OLDEST, MOST colorful car in the race was Mejia's '38 Buick (below) which was plastered with slogans like "God Bless Us" and paintings of Columbus' landing. The funnel near the front bumper is an air intake for clutch cooling



PEARSON'S OLDS ran out of gas 300 yards from the Oaxaca finish line. Ever try pushing a car that distance in high-heeled boots? Olds' showing in this year's race was not very sensational



FLYING IN Kiekhaefer's plane, Rick caught this exceptional shot of Panini's Alfa-Romeo after it had left the road in a fast curve, the driver losing his life. Mexican papers blamed epileptic seizure

stock car in the race, in fact it would outrun anything but Bettenhausen's modified Chrysler (we're talking U.S. iron now, leaving the Europeans out). Teague was running the standard two-carb manifold and the optional racing head and, as far as I know, his only modifications were polishing of the ports and relieving the block. He could outrun Sterling's Chrysler by a good five mph. But Marshall had brutal luck and broke a fuel line the first day out, had a wreck in Mexico City while driving from the finish line to his garage, finally lost his overdrive in the home stretch.

The American car that came in on the Ferraris' heels was Bill Sterling's Chrysler and it can, for practical purposes, be considered a stock machine. Apparently due to the construction of the rear-end gear housing, the lubricant there tended to froth at high speeds, losing its lubricating quality and necessitating replacement of the rear end three different times in Sterling's case. This was a problem that plagued only Chryslers and was finally solved when a mixture of white lead and castor oil was used for the rear-end lube.

The greatest single cause for failure on the American cars was brakes. As the years have passed and wheel sizes have diminished, brake sizes have gone down

accordingly and the manufacturers have really done little to compensate for the sacrifice. Races like this will pin-point the bugs in production cars as no other test can, and it's certainly to be hoped that Detroit will profit from the lesson.

Something I won't forget for a long time was the amazing performance of Korf's Nash during the mountainous legs of the race. The car handled very well—well enough to enable Korf to finish tenth among cars packing much bigger engines.

O'Farrill's vastly modified, very costly, huge-displacement Packards handled well, but should have gone faster than they did. The Oldsmobiles probably made the poorest showing of any make, 23 starting the race but only 9 finishing. Oldest car in the race was the '38 Buick of Durán Mejía and Campos Rodriguez. It had been elaborately, fantastically (see photo) and carefully prepared and everyone but the old Buick's pilots was surprised to see it run very steadily and finish the race, even though limited top speed put it out of contention. There were two Cadillacs that could really run: those of Rogers and Fredricks, 7th and 24th places. These jobs were running two-carb manifolds and were rumored to have the new '52 cylinder heads. They went fast but didn't have good handling qualities.

There were also just two Lincolns in

the race that could be considered as competition—those of Crawford and Falkner. These machines were pretty rapid jobs and Crawford wound up in eighth place with his. Falkner's car seemed to be inadequately prepared, otherwise Walt might have finished very, very close to the top. These modified cars definitely handled better than the Caddies.

Actually, engine failure was remarkably scarce, all the really fast cars holding up beautifully, pointing to a great deal of intelligent tuning and preparation, plus good judgment on the part of the drivers who were handling the hottest equipment.

#### And Notable Drivers

Bill Sterling, the Chrysler third-place winner, is not a race driver in the familiar sense. However, he's an excellent road driver and turned in one of the finest performances of the five-day grind. He used his head every inch of the way, drove fast but kept his machine together and never lost a tire on the road. He's a natural driver and this, as far as I know, is his background: he's driven a lot of high-speed miles over those endless Texas roads; for several months he drove a truck between Mexico City and El Paso, giving him a real knowledge of that part of the road; he drove well in last year's race, was Johnny Mantz' chief contender



CARS WERE blessed in front of the Tuxtla cathedral before the start of race's first leg



Good . . .  
Twenty-four

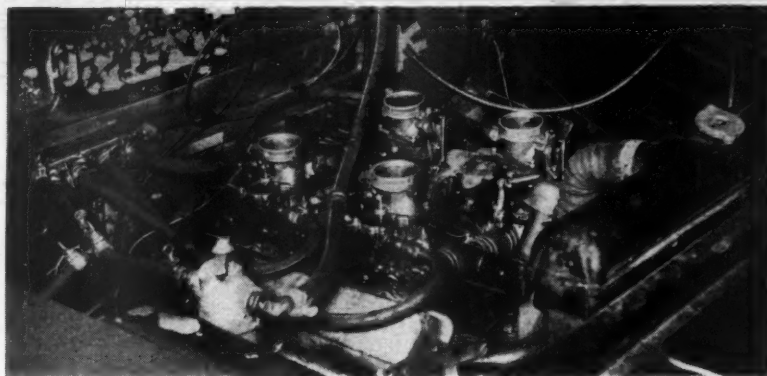


. . . and not so good  
Motor Trend





TO TAKE death out of the death seat, anchor it firmly to the floor and add a safety belt. This is Phil Walters' Cunningham-entered Chrysler



MUCH NEOPRENE hose, many carbs, Scintilla mag made the engine of McAfee's Olds impressive. Modified engines like this were commonplace because American cars needed much extra horsepower to compete with the spirited Italian engines and featherweight, aerodynamic bodies

—or vice versa. Sterling did a fine job.

Marshall Teague actually used fewer tires than anybody in the race, turned in a very smart performance; if bad luck hadn't dogged him, his well-judged driving would have put him way, way up front. In my opinion—and in Clay's too—Sterling and Teague were the most impressive drivers in the entire event.

Tony Bettenhausen surprised us by making very slow time through the mountains and he told us in Mexico City that that sort of driving was really a novelty for him and that it took him the first two days to get it figured out.

Walt Falkner is a fine man on asphalt and an excellent road driver. Naturally, his big Lincoln was at a disadvantage in the mountains, added to which he had only one spare and his front tires were

of unequal size. In spite of all these strikes against him, he managed to nurse his tires carefully, while still driving fast. When he rolled into Oaxaca, his front tires were down to the cord, but he was up in sixth place.

Of the foreign drivers, France's Jean Trevoux actually looked better to me than any of the Italians, since the car he was driving required a greater show of skill to stay in competition. The way he led that Packard through the turns was very masterful; he's an extremely smart driver. The best Mexican driver was also behind the wheel of a Packard: Douglas Ehlinger of Puebla. His judgment was far superior to that of any of his countrymen. Ehlinger finished in 14th place, with a speedier machine he would have done better.

### The Rewards

When Clay and I rolled across the Juarez finish line, one minute and 57 seconds behind third-place man Sterling, we earned 50,000 pesos, which works out to \$5795. Then Lincoln-Mercury in Mexico City asked us to bring the car there for display. We did, and were pleasantly surprised by an award from L-M for another 40,000 pesos. The Mobiloil people gave us \$500 in U.S. money and, all told, we came out with about \$11,600 in prize money. That in itself is enough to make us look forward to next year's race.

There are a lot of other attractions besides the purse. First of all, the Mexican people are so wonderful, treat you like visiting royalty. Then, the road is such a perfect combination of every type of

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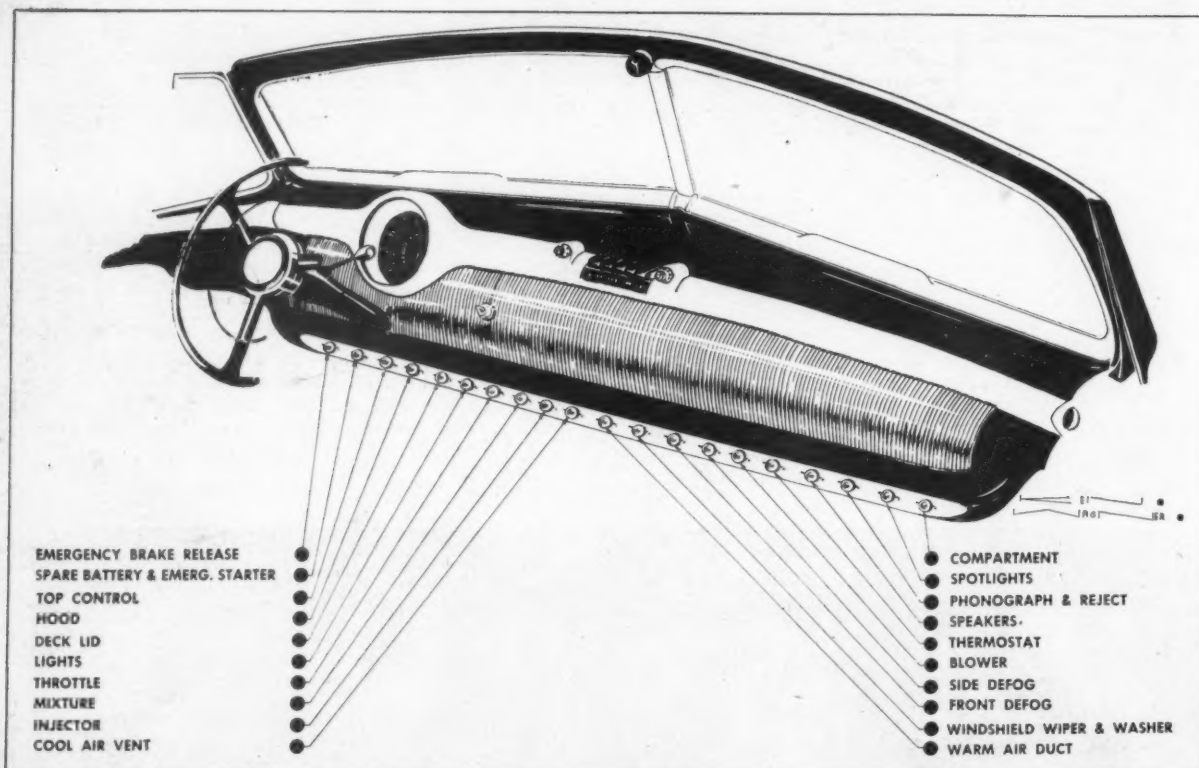


THE MEXICANS went the whole way, gave me this terrific trophy made of solid bronze, on a marble base. It was all I could do to lift it off the table

# monte carlo

**Custom Buick cost Dale Collister  
\$6200 and one year of time**

photos by Veil



TWENTY BUTTONS long, the dash panel of the Monte Carlo is a gadgeteer's paradise. It is noteworthy that the designers managed to keep the appearance simple despite the forest of controls

GLOVE COMPARTMENT is usurped by a phonograph which plays through three speakers.

## MODIFICATIONS

Grille—'50 Buick. Pieces were shaped and welded from the crest of the hood to the grille frame support, then curved out and additional pieces were butt-welded from the hood to the reconstructed curve. Parts from a '48 Packard grille were set behind the Buick frame.

Hood—'48 Buick.

Headlight doors—'51 Mercury.

Parking lights—'50 Nash lenses.

Fender extensions—'49 Cadillac.

Door step—Cadillac.

Deck lid—'49 Cadillac, double-hinged.

Rear skirts—'48 Series 98 Oldsmobile.

Rear bumper—'49 Buick.

Tailpipe housing—hand formed, blended into fender.

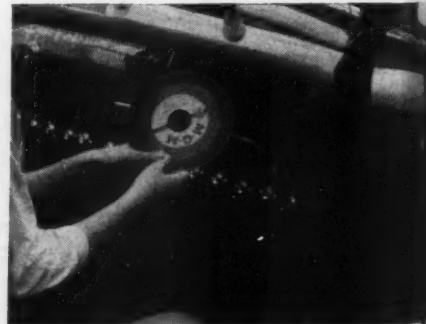
Dashboard—'50 Ford instruments, '50 Oldsmobile radio grille. Plexiglas button panel.

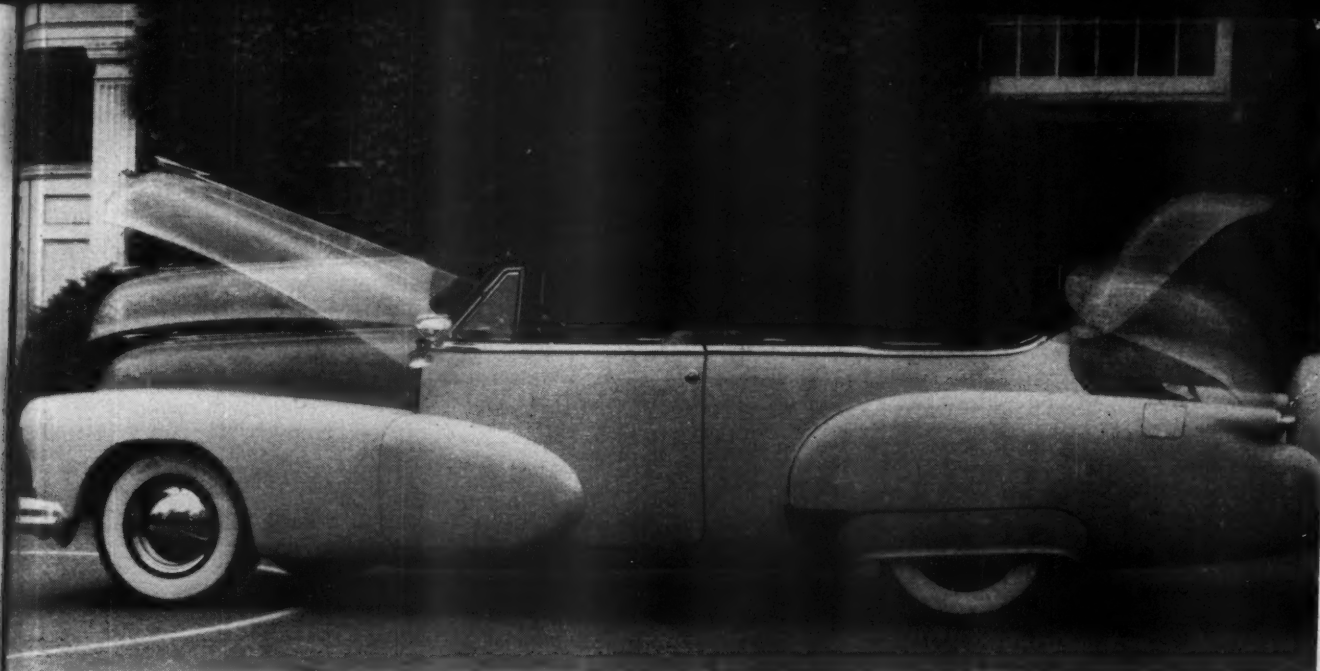
Top, seat, hood, deck lid, windows are automatically operated. Pushbutton doors, with lock in center of button.

Engine—144 hp Buick.

Cost—\$6200.

Ceiling price—\$3630.52. (OPS)





GHOST IMAGES illustrate clearly the positions of hood and deck. Especially interesting is the double-hinging of the deck lid so it will clear spare

**I**F YOU OWN a '47 Buick convertible and would like to dress the old girl up a little, you might try some of Dale Collier's tricks. His "Monte Carlo," as shown in the unusual illustrations on these two pages, is one of the most ambitious jobs of customizing ever attempted on the Buick groundwork.

The cost of the car exceeded \$6,200, which puts it out of the reach of the ordinary enthusiast, but there are many helpful ideas for you. The deck lid for example—it's double hinged so that it will rise straight up when the switch on the dash panel is thrown. This solved the problem of the spare tire, making it unnecessary to hinge the solid cover so it could be swung out of the way to get to the trunk.

Design was one of the important steps in building the Monte Carlo. Dale says that this part of the job consumed a month of steady work. The actual construction required 11 more months and the group—M. Antonelli, Don Humpel, Chris Roberts, Pierre Wagner, Tom Hunter—worked 12-hour days. Wagner doubled as designer and Hunter was responsible for the art work.

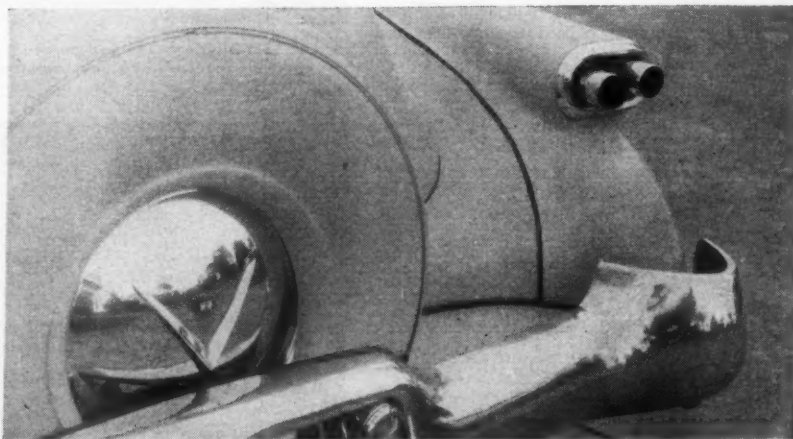
If you're gadget-minded, you've already lost yourself in that staggering array of controls on the dash. The phonograph works well, given a civilized road surface, and the reproduction over three independently controlled speakers is excellent.

The only discouraging report on the Monte Carlo came from the OPS. As most of you probably know, before you can sell a custom car for more than the ceiling price of the car it was based on, OPS must give its permission and set a ceiling for that particular car. It was decided that the top price for Dale Collier's car would be \$3,630.52.

March 1952



'50 BUICK GRILLE frame almost conceals '48 Packard bars behind. Thanks to good design, Monte Carlo retains basic Buick identity despite customizing and heavy sugaring of Cadillac body parts



TAILPIPE HOUSINGS are set in '49 Cadillac bullet-tip extensions which were modified to fit Buick fender. Rear deck lid was also taken from a '49 Cadillac. Rear bumper is from a stock '49 Buick

Twenty-seven



# LeBaron

Extraordinaire

COACHBUILDER

Americain



AUTOMOBILE MANUFACTURERS ASSN.

OUTSTANDING '31 Packard was made for Mrs. Walter Briggs. Everything above waistline is chromed. Interior holds four pigskin-upholstered club seats. Two copies of body were later built

By Eugene Jaderquist

THE LADY WAS NOT impressed by the office. But she had already opened the door and three men were watching her so it was too late to back out.

"I want to speak to Mr. LeBaron," she said.

Nothing in the lady's background prepared her for the silence that followed. She had only to beckon wordlessly to summon owners and managers in the best shops on Fifth Avenue. Yet the young men in the sparsely furnished room only looked at each other, not at her. Finally a slight, curly-haired man who did not bother to wear a coat to hide his suspenders, rose and walked toward her.

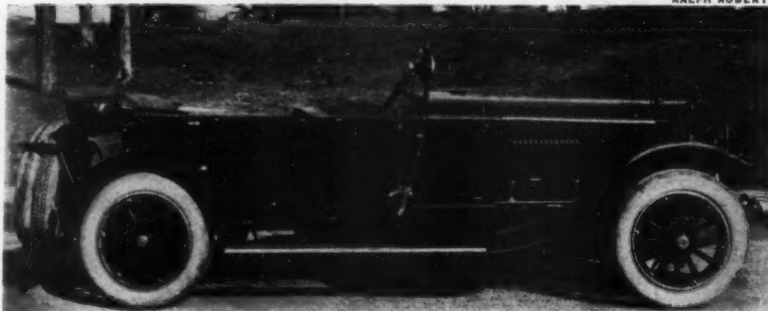
"I am Mr. LeBaron," he said. "May I be of assistance?"

If the lady stayed to become a customer she soon learned that Mr. LeBaron had one thing in common with Mr. Santa Claus—neither existed in the ordinary sense of the word. But after she'd seen the design LeBaron Carrossiers executed to satisfy her need for a motor car, she ceased to care *who* had come to greet her that first day. Things were no different in 1921 than they are now in one important respect—performance counts

THE LATE Edsel Ford (shown here with his wife) ordered this special sport phaeton from LeBaron, stayed around to become a friend of the firm, later bought Roberts' designs for Lincoln line

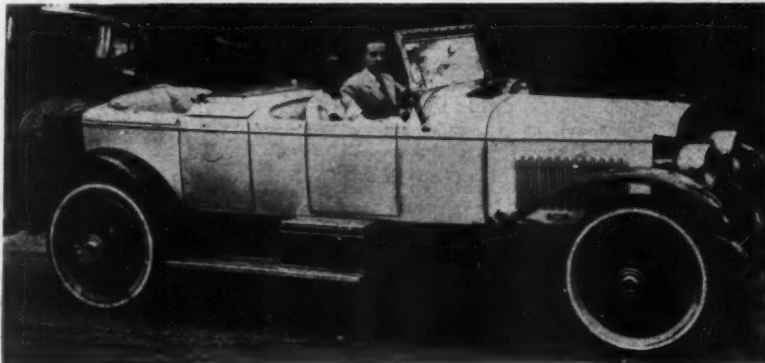
Twenty-eight

RALPH ROBERTS



VINTAGE BENZ appealed to well-muscled gentlemen. Outside gear and brake levers are not for the weak in biceps. Body looks low because sides are not high, but driver sits with head in breeze

RALPH ROBERTS



Motor Trend

No.	Chassis	Model	Type	Medium	Remarks	Date Delivered	Delivered + Billed	Date Pd.
300	Lincoln	136" W.B.	4 pass (let)	Dark Draft	Yale Mts		On acct	
301	Revue	132"	2" Run	Pen & Ink	Fleetwood	Feb 22	Feb. 24	25 00
302	"	132"	7" Small	"	"	"	" 24	25 00
303	Lincoln	129"	4 pass open	"	"	"	" 23	25 00
304	(distinctions on former work)				Gates	"	" 23	25 00
305	Gates	(Radiation sketched)	P+9	"	"	"	" 23	30 00
306	Lincoln	136" W.B.	4 pass	Chas. W. Co.	Yale Mts	"	" 23	20 00
								Feb 19
								25 00

ROBERTS' single-entry bookkeeping system was adequate for LeBaron's first year. This fragment from 1921 shows cars, jobs, customers and amounts

more than name. And the three young men were New York's most enterprising and capable team of designers.

Tom Hibbard and Ray Dietrich left the stiff-necked Brewster Body Works in 1920 to form LeBaron. Ralph Roberts came down from Dartmouth in February 1921 to complete the trio. It was Roberts who usually assumed the LeBaron personality for customers, since it fitted his duties as salesman, bookkeeper, writer, and liaison man between his partners and other body building firms. Hibbard and Dietrich were the designers and artists, both contributing equally to the seemingly inexhaustible flow of ideas from the tiny office high in the building at Number Two Columbus Circle, corner of Seventh and Broadway, New York.

The first two years were a constant struggle against the traditional problems of a new business—bankruptcy and obscurity. At \$25 per drawing and with each car requiring only one to four such sketches, nobody could feel very secure. Partly to advertise their talent and partly to pick up a fast \$75, the partners began a series of articles in *Motor Life*. Hibbard sketched and Roberts wrote, usually at night because the business hours were reserved for bettering relations with the

local dealers and body builders whose support was necessary. At the end of the first business year, May 1921, the profit and loss statement showed a total income of \$6500.

The hours were long and the future doubtful, but the partners lived and worked in an informal atmosphere. One of the scenes that sticks in Roberts' memory is of a post-midnight session in the office. Hibbard was working on a sketch for an article to meet a deadline the next day; Dietrich sat hunched over his drawing board trying to capture an idea for a phaeton; Roberts plugged away at the sagging typewriter. In the corner the coffee pot ground out a supply of caffeine. Dietrich suddenly looked up.

"Ralph," he said and Roberts stopped pecking. "Ralph, why do you bother to keep accounts for us?"

There was only one logical answer and Roberts used it.

"I've got them all in my head," Dietrich retorted. "We don't have any customers I don't know."

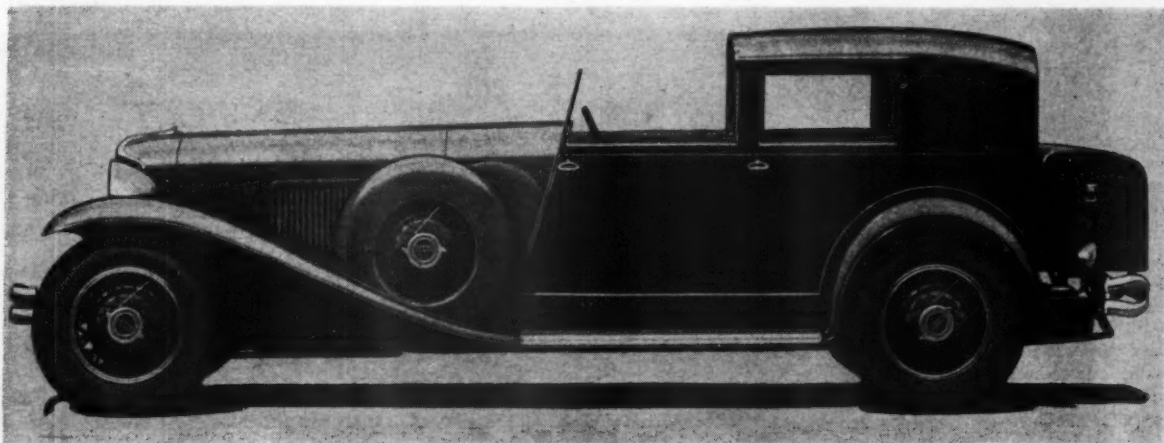
Then, while Roberts paced him with the ledger, Dietrich recited entry and amount for accounts payable and receivable. He didn't miss one. The mind that could turn out complete working drawings in

two days also had a niche devoted to figures.

Late in 1921 came the first chance to go up a notch. Previously, all the work had been sketches, executed for a customer, a body builder or a dealer. LeBaron had no body works of its own so the actual construction of the automobiles took place at Fleetwood (not yet a Cadillac subsidiary), Bridgeport, Derham, United, Locke, Holbrook. Once the sketch had been handed over to the builder, LeBaron was through with the car. Then York Motors, New York Lincoln dealer, ordered a phaeton body for the 1921-1922 salon.

It was three weeks before the salon and the boys had nothing but a lot of ideas and a Leland Lincoln chassis. They decided to take all the responsibility for delivery on themselves. In a series of late sessions, sketches and working drawings were completed. An agreement was reached with Smith-Springfield, a Massachusetts body firm, to build the car under LeBaron direction, much as a building contractor would build under an architect's orders. Eighteen days later the Lincoln was delivered, complete, with a body as lean and honest as the chassis.

(Continued on next page)



FROM THE ARTHUR TWOHY COLLECTION

MOST FORMAL classic body was the panel brougham. Here, on the L-29 Cord chassis, the severe lines are stiffened and accentuated by the molding

# LeBaron

Continued

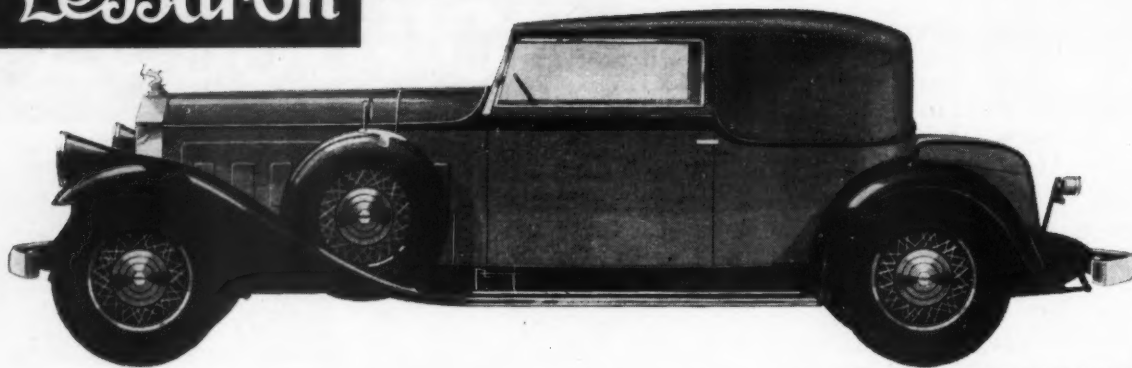


PHOTO FROM THE ARTHUR TWOMY COLLECTION

HANDSOME as it is, this Pierce Arrow was a costly mistake for LeBaron, who dropped a big financial stake when Pierce got into financial difficulties

For this job the designers were paid five per cent of the retail price. No expert mathematician had to point out that this was an improvement over the former arrangement. Subsequent orders were handled similarly and the good showing of the phaeton at the salon brought in more business than before. Everybody was willing to cooperate. The dealers were happy to be connected with a firm that could supply superb, finished sketches on a moment's notice, then take the car through to completion at the customer's order. The body builders also felt free to call on LeBaron for assistance when a customer applied directly to them. There was profit for all in the arrangement.

By 1923 the three young men were in a position to move farther into the world of competition. It was decided to add some chic to the letterhead so Tom Hibbard went to Paris and opened a LeBaron branch there. Importers of fabulously expensive foreign cars appreciated the importance of the Paris office and Isotta-Fraschini, Minerva, and others began to look to Dietrich and Hibbard for designs. In the United States, Locomobile bought a series of Dietrich designs and Stearns-Knight followed suit.

Now that the work was flowing faster than the original group could take care of it, and a steady series of jobs were assured, LeBaron took another major step and merged with the Bridgeport Body company. The new firm became known as LeBaron, Incorporated, and Bridgeport was paid for its participation with stock in the company. In three and one-half years, LeBaron had grown from a one-office, three-man operation to a major figure in the custom automobile business with 40 employees, one plant, two design centers. Profit per car grew at the same rate. Now, if LeBaron handled the deal all the way with the customer himself, the mark-up ran about 33 per cent. On a \$5000 job, \$1500 stayed with the company. If someone else retailed to the

customer, the profit averaged \$350. Formerly, under the "architect" plan, the net would have been \$250 and in the earliest sketch-days, a probable \$25. When work was done on a foreign chassis, the take-home pay was even higher. Since half the bodies produced at Bridgeport were for Isotta-Fraschini, Minerva, Hispano-Suiza, Renault, Benz, Lancia, Mercedes, it is evident that the firm was in no danger of bankruptcy.

With success came the first rift in the closely knit partnership. Tom Hibbard bowed out to team up with Howard Darin in Paris. His shares in LeBaron were bought by Dietrich and Roberts.

At the same time the entire custom car business went into a new phase. Heretofore most special bodies had been built either for the individual customer or for a dealer. Now a new customer appeared—the manufacturer. He wanted series customs in lots of 20 or 30 that he could advertise in his sales brochures.

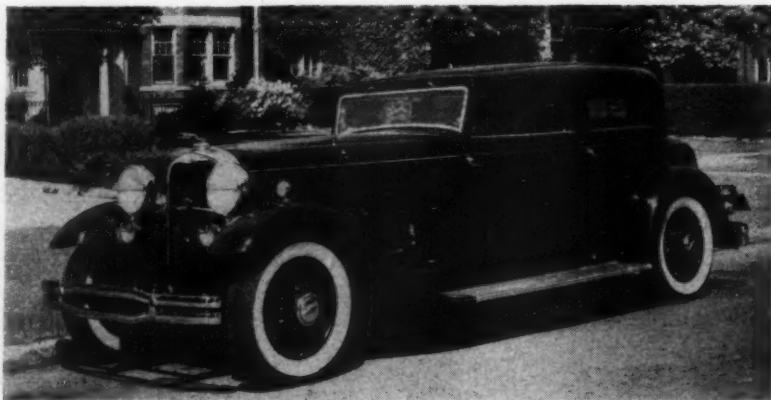
LeBaron worked into this new trade easily. Its foot had been inside the Lincoln doorway since a curious incident of a short time before. A letter had arrived at Two Columbus Circle from

"Lincoln" magazine, requesting photographs of custom bodies for illustrative purposes. Roberts shot back a response in which he pointed out that any completed car was an old design and wouldn't "Lincoln" rather have something up-to-date like, say, a design sketch on a new Lincoln chassis? The magazine thought that might be good. Dietrich whipped out a fast drawing which was printed.

In less than a month, LeBaron received a summons to dispatch an emissary to Detroit. Dietrich went. He found an irate advertising manager half-buried in mail.

"They all want to know when and where they can buy this car," roared the official, pointing to the sketch, "and I don't know how much it will cost or whether it can be built or not. And just how," he added, "did you manage to get the inside of the front cover?"

That sketch was the beginning of one of Lincoln's first custom series. An influential friend also assisted in the transition from individual to series customs. The late Edsel Ford had been a constant kibitzer at the LeBaron drawing boards since the early days of the company. He loved fine machines and custom coach-



AUTOMOBILE MANUFACTURERS ASSN.

'31 LINCOLN close-coupled sedan built by LeBaron in Detroit. This is the first "long," cowl-less hood built in America. Walter P. Chrysler liked the design so much, he patterned his Imperials after it



work with the same passion his father had lavished on the Model T. The custom Lincolns of the '20s and '30s were his babies. Many of them were designed and built by LeBaron.

As Lincoln made money and boosted prestige with LeBaron cars, other manufacturers decided they wanted a famous and exclusive name to tack to their products. There was a sudden raid on the New York body builders by Detroit mass-production body firms like Murray and Briggs. Fantastic sums were offered—big promises made. Nobody was wooed more ardently than LeBaron.

Roberts held out. He didn't want to be swallowed by a Detroit whale even if its belly was lined with gold. Dietrich saw it differently. He spoke in terms of opportunity and expansion. In 1926 he left New York and went to work for Murray, later forming Dietrich, Inc. Roberts stayed in New York and kept the LeBaron name.

And so began a fantastic period. At the head of the company was a man who knew the business from cowl to deck and back again but had never designed an automobile in his life. There were orders on the books when Dietrich left. There was the plant in Bridgeport with almost 100 men to keep occupied. And there were no sketches to work from—no detailed drawings to guide the craftsmen.

Roberts gambled. He took Roland Stickney, staff artist, aside and talked design to him. As he talked, Stickney drew. As Stickney drew, Roberts corrected and Stickney re-drew. Between them they turned out a working sketch.

Bridgeport built the car from that sketch. It is a matter of record that the car pleased the customer.

Briggs kept wooing Roberts and finally, in 1928, was successful. Headquarters were set up in Detroit, the New York office was moved to swankier headquarters on Fifth Avenue and the Bridgeport plant was enlarged. Roberts divided his time between Detroit and New York as the business, supported and encouraged by the big Briggs bankroll, mushroomed to

huge proportions.

After the stock market went berserk in October, 1929, the market for custom cars dropped sharply. New York's leadership in the art of body building perished simultaneously. Briggs retrenched by closing the New York office of LeBaron and the Bridgeport plant.

Most of the LeBaron bodies extant today were built in Detroit. The handsome Chrysler Custom Imperials of '32, '33, '34 were turned out as series of 50 each for a price of about \$2000 wholesale, per body. Stutz was an active customer, buying both custom and stock bodies from LeBaron.

A partially successful experiment of this period was the famous Model A Ford town car. Fifty were assembled, the first going to Mrs. Henry Ford. It was, and still is, Roberts' belief that a town car should be small and easy to handle in traffic. All the little Fords were sold.

As the '30s progressed, LeBaron made more and more standard production bodies. The last Franklin Twelves and the first Lincoln Zephyrs were designed and constructed there. Roberts turned to the design of these and smaller cars as Briggs found less and less for its prestige division to do. Eventually there was little reason to maintain the name that had been purchased so dearly in New York in 1928. It carried no cash value once the classics had lost their appeal. Only once was LeBaron resurrected. That was in 1941 when the Chrysler Newport and Thunderbolt appeared. Neither model, however, was intended for anything more than advertising and publicity.

Today Tom Hibbard is still in the business of design; Ray Dietrich owns a body shop; Ralph Roberts is designing and building Fiberglas-reinforced plastic bodies in Pasadena, California. All their talent and experience could not put LeBaron back together again. But through them, and through the matchless cars they built, LeBaron, Incorporated has had much to say about the design of the automobiles we are driving today.



RAY DIETRICH (left) and Ralph Roberts (right) on the roof near the office window. Dietrich's hat is artfully placed to coincide with hat on billboard in the distance across Broadway

March 1952

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Thirty-one

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## Saving Tax Dollars

(Continued from page twenty-one)

culate the amount on a mileage basis. Chances are you pay between six and eight cents per mile for the privilege of driving. Eight hundred miles would then represent a deduction of \$48, minimum and \$64, maximum.

It matters not what kind of car you drive, providing it isn't utterly ridiculous. No intelligent tax investigator would believe that a traveling salesman could perform his job efficiently if he made his rounds in a 1906 Ford or an early Miller racing car. But he could quite conceivably drive a new XK-120 Jaguar or a '34 Lincoln or a chopped and channeled custom.

Don't forget that medical expenses are deductible. The time you drove to the doctor or the fast trip to the hospital to get emergency treatment are both considered medical expenses. So is a trip to the dentist.

Now look at your 1951 income-tax blank form 1040. You will notice on page one that you may either itemize your deductions or claim the approximately 10 percent deduction by using the chart on the back of the blank. This 10 percent is the government's estimate of the average sum of deductions. It includes donations to charity, medical and dental expenses, taxes and all other items so far mentioned in this article. Perhaps you only spend 10 percent of your income for such items—only you can decide that. If, however, you spend more, it will definitely pay you to itemize.

On page three of form 1040 you will find blank spaces for your deductions. Under the heading "Interest" will go all the interest you've paid on all installment contracts you've been carrying for the year. Under "Taxes" will go gasoline taxes, sales taxes. Under "Losses, etc." will go the money you've paid out to repair results of collision, fire, theft. Under "Medical and dental expenses" will go those bills plus the trips to and from the doctor in your car. Under "Miscellaneous" will go those business jaunts around town that we talked about earlier.

Not all business trips will go in this space, however. If you were away from home overnight while on business, you will enter all expenses of that trip on page one on a blank line following the number 2. Just write in "Travel" and the total amount spent on all such trips and then subtract that amount from your total wages to give you your adjusted gross income on line 6.

All this may sound like a job for an accountant, but actually it is not very complicated if you go about it systematically. You'll want to take your time anyway, because it may require much concentration to remember all the small items as well as the big ones. When you're

through, add all your deductions. If they total less than the 10 percent allowed by the government, use the chart on the back to compute your tax.

A note of warning: you may be called upon to prove any extra-large deductions. Be ready to do that—not necessarily with the receipted bills but with a good explanation and some confirmation. If you bought things, the stores have a record; if you made business trips, you saw someone who remembers you or your boss has a record.

Undoubtedly the saddest error you can make is to try to put a sly one over on the Collector. He doesn't like that and he may very well find out. Sometimes it takes a year or more, but when the agent comes around to see you, you're in a fair way to be stuck for the amount you should have paid plus penalties. If you don't think those penalties are staggering, just devote a quiet afternoon to poring over the newspaper accounts of famous evasion cases.

## Competition and Custom Cars

Brother Collector is not on your side if you are an automobile hobbyist. You can't deduct customizing or hopping-up expenses any more than the stamp collector can step down a bracket by deducting purchases of rare triangles. Even if you enter your car in road races, drags, time trials or shows, the ruling is that you are simply competing in a contest, not trying to make a profit. Unless the prizes are large enough to allow a consistent winner to make a comfortable living, those who compete are obviously not hoping to make a profit.

The sole exceptions to this rule occur when the owner of the car is in a closely allied business. A foreign-car dealer might conceivably run one of his sports models in road races for advertising purposes. Or a custom-car builder might build up a car to exhibit in shows and in front of his place for the rest of the year. If you qualify under either of these exceptions, you'd better talk to an expert and see how much of the total cost of building and maintaining the machine can be deducted in your particular case.

Consulting the experts is sound procedure for everyone to follow. Expert advice is free—at the local office of the Collector of Internal Revenue. The staff there won't prepare your return for you but they will answer questions gladly.

Finally, here's a weird one to remember. Say that you make a deduction and the Collector refuses to allow it. You take the matter to court and win. If next year your neighbor makes a similar deduction, the Collector can make him take the case to court, too. Unless the decision is made by the Supreme Court, the Collector is permitted to ignore the precedent. This saves a lot of money for Uncle Sam but it does not necessarily endear the Internal Revenue department to the bewildered taxpayer.

—Eugene Jaderquist

Motor Trend

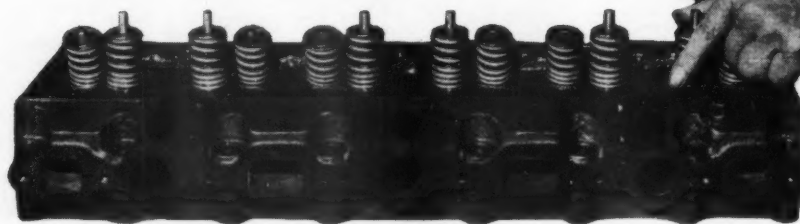
ACCESSORY TRIAL . . .

# RAJO RETURNS...

With New POWER for Your CHEVROLET

BY GRIFF BORGESON

PHOTOS BY FELIX ZELEKA



**B**IG NEWS HAS been made again by a little man with a long name and a background that extends back to the dawn of automotive history. Joe Jaegersburger's career seemed to have hit its climax back in the 1920s when he invented, produced, and sold by the thousands the famous "Rajo" ohv head for Model Ts. The Rajo ("Ra" for Racine, where it was made and "jo" for Joe, its maker) turned Lizzies into high-performance bombs and was one of the cornerstones of the great speed and power industry that was to grow into the

hot rod movement. But now, at the age of 68, Joe has done it all over again, this time for Chevy owners.

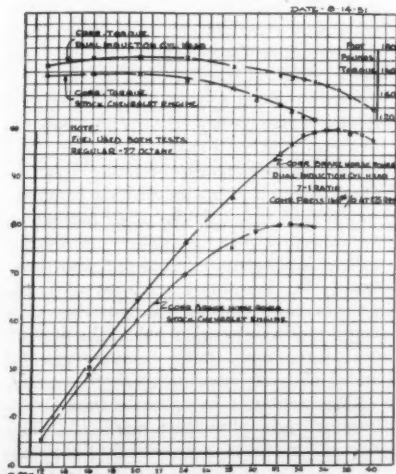
I've driven Joe's own '51 Rajo-equipped machine and it's a great understatement to say that no stock Chevrolet ever went like this. Clocking its acceleration showed that almost three secs. had been lopped from the stock 0 to 60 mph figure! And that sort of improvement was typical of the entire speed range.

Chev owners who have hungered for "urge" can really have it now and the installation of the Rajo head is fast and simple. The new head gives the engine a higher, straighter horsepower curve that gives the car "jump" with the slightest increase in throttle opening. The smoothness of the modified engine is uncanny, but the strangest thing of all is to sit at the wheel of a car that was never intended to go like a jackrabbit and have it do just that. The surprise is as great for the driver as it is for the cars he leaves behind.

CREATOR of Rajo head points to secondary intake part on his new unit for Chevis. Over-size intake valve in redesigned combustion chamber handles greater volume of fuel-air mixture

The Rajo Automotive Research Co. has turned out tens of thousands of stock, semi-race, and full-race engine heads in its more than 30 years of activity, meaning that there's a very great reservoir of know-how behind the new Chevy kit. The big difference between the stock and the Rajo Chev head is the Rajo's dual intake sys-

(Continued on page thirty-seven)



LEFT—HORSEPOWER and torque curves of stock and Rajo-modified Chevrolet engines are shown here. Best stock bhp was 80.8; best with Rajo conversion was 101.1. Best stock torque was 159.5 lbs.-ft., while Rajo hit an actual 172.0

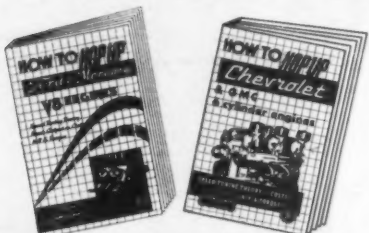
RIGHT—CHEVROLET RAJO installed: Finger points to secondary carb on prototype head. Production kits will employ downdraft carb which should give even better performance





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## Spotlight on Detroit

(Continued from page eleven)

The reliable six-cyl. engine develops 97 bhp and has a 7:1 compression ratio. Logger life is predicted for main and rod bearings due to the use of an improved base metal.

There are 10 body types in the new Plymouth line, and Chrysler's new tinted glass is available as optional equipment for each model.

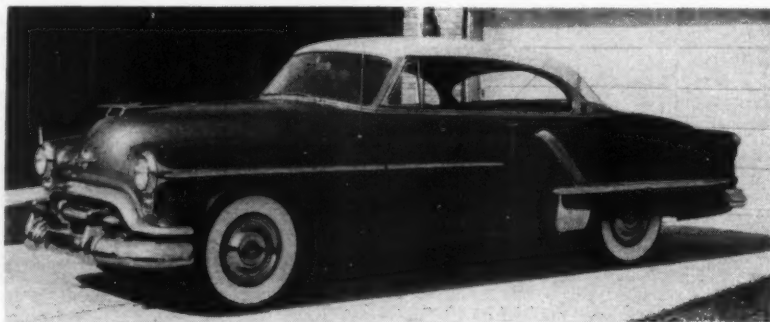
### CHEVROLET HAS MINOR CHANGES

Like most other 1952 cars, Chevrolet's new models feature only slight style variations over last year's line. The firm is stressing two mechanical improvements, though.

One is a new engine mounting to overcome vibration and road noise. It suspends

motive Engineers were treated to a sneak preview, complete with slides and an edifying talk by E. S. McPherson, chief engineer, Ford Motor Co. "Immediate questions you might ask," McPherson started, "are, 'Why an overhead valve engine?' and, 'Why a Six instead of an Eight?'" The reasons are based on tooling amortization and continued public demand for a six-cyl. engine. Normally, you figure on tooling lasting for 10 years. In that span we knew that higher octane fuels would be forcing compression ratios possible only with overhead-valve engines, although we still believe that our L-head engine would have been good for a number of years."

Overall size of the new engine is approximately the same, but displacement (215.3 cu. ins.) and dry weight (502 lbs.) are both less. Bore (3.5 ins.) and stroke (3.6 ins.) make for an almost-square en-



ALONG WITH the Super 88 and Deluxe 88, Olds offers the 98, shown here with Holiday coupe body. This series has 160 bhp engine, uses new GM four-throat carb. Hydraulic steering is optional

the power plant in the chassis at three points. The other is improved carburetion, and the addition of "automatic choke" on the 235 cu. in. Powerglide engine.

Appearance-wise, Chevrolet presents a new grille and changed ornamentation around the body. Eleven styles are available in two series.

### WILLYS IS STRIKING

Although, as of MOTOR TREND press time, Willys had not set official announcement dates for its all-new passenger cars, the Toledo firm has made available a photograph of one of the two new series—the "Aero Wing."

This latest entry into the passenger car field will be powered by Willys' completely new six-cyl. F-head engine developing 90 bhp. It is reported to deliver up to 35 miles per gallon of gas at a speed of 30 mph, using overdrive and regular fuel.

Public showings of the car will be held nationally as soon as production allows the company to stock all of its dealers. MOTOR TREND expects to test one of the machines at an early date.

### NEW FORD OHV SIX ENGINE

Before public announcement of the Ford overhead valve six, members of the Chicago Section of the Society of Auto-

engine, resulting in 18 per cent less piston travel (which means longer engine life). Also as a result of this bore-stroke ratio, bhp (102 @ 3100 rpm) is 76 per cent of the indicated hp, an increase of seven per cent over the previous model. Maximum torque is 186 lbs.-ft. @ 1500 rpm.

The wedge-shaped combustion chamber incorporates inclined valves, operated by rocker arms and pushrods (similar to the Studebaker V-8 arrangement) actuated by a silent chain-driven camshaft. When asked why Ford did not use a combustion chamber like Chrysler's, McPherson replied, "We did not feel that it was particularly advantageous, considering all things: cost, tooling, production difficulties, etc."

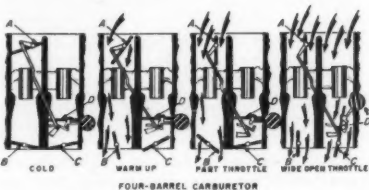
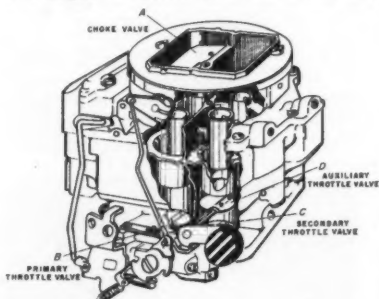
The cast-in-steel, three-ring pistons (with the top ring chromed on commercial engines only) deliver their motion to a new type molded iron alloy crankshaft, which, McPherson pointed out, has three times the dampening qualities of steel. Four main bearings are used now, but with compression ratios higher than the present 7:1, three more main bearings can be added without changing the bore spacing.

Carburetion is by a single throat carburetor and a four-port manifold. "The reason for a four-port instead of a three-port," said McPherson, "is that we can

add dual carburetion in the future with no change in porting."

A saving of radiator weight in copper (three lb.) and in brass (two lb.) has been attributed to the overhead valve system. At 4000 rpm, 20 per cent fewer BTUs are rejected, permitting the use of a smaller (by 43 sq. in.) radiator.

In answer to the question of whether a V-6 might be better than an in-line six,



**MOST NOTABLE mechanical change on Buick Roadmaster series is four-throat carb which functions as a set of dual carbs. Secondary carb only goes into action when the throttle opening is wide. Engine now boasts 170 bhp**

McPherson replied, "For weight, size and accessibility, the in-line is better. After all the problems of a V-6 are carefully analyzed, you come to the conclusion that the best way to eliminate them is to add two more cylinders."

"Will the Six replace the V-8?" he was asked. "Definitely not," was his reply. "It replaces only the L-head Six. We'll continue producing the V-8." "L-head or overhead?" came the next question. "Overhead, but we're not here to talk about that. That's for another meeting."

#### STUDEBAKER FEATURES HARDTOP

The pace-setting car for Studebaker in both the Champion and Commander lines is an exceptionally attractive hard-top. For a road test of the '52 Commander cars see Walt Woron's *Motor Trials* on page 15.

#### ONLY THREE LEFT

With these introductions, only three companies have yet to bring out 1952 lines . . . KF, Nash and Ford.

Nash is reported to have a distinct European styling air as the result of work by ace Italian designer, Pinin Farina.

Later in the year Hudson will enter the light car field. It will introduce a small version of its present models, designed to accommodate six persons and incorporating the stepdown design. Actual introduction of the new car is slated for summer.

—Harry Cushing

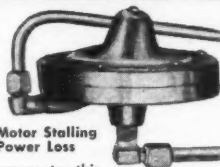


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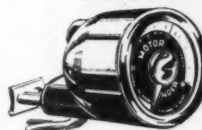


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Cadillac, 1903 ("Duster Data")	May '50	Benz	July
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D. Cameron Peck's Collection	Jan '50	Calif. HCC Grand Tour	Aug.
Early History ("Duster Data")	Jan '50	Chrysler Imperial	July
Ford Surrey, 1905 ("Duster Data")	Feb '50	Classic Auto Shows	Dec.
Jewel, 1908 ("Duster Data")	Nov '49	Classic Body Styles	Aug.
Twombly, 1911 ("Duster Data")	Oct '49	Daimler	July
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Buying a Classic Car	Sep '50	Duesenberg, Restyling	Sept.
Classic vs. Restyled	Mar '50	Hispano-Suiza "Boulogne"	Feb.
Cord	Jul '50	Maxwell '09	April
Custom Bodies (1930-1935)	Nov '49	Mercedes, First	July
Custom Bodies (1935-1941)	Dec '49	Rolls-Royce	June
Duesenberg Series J	Jan '50	Stutz Four-Passenger Speedster	Sept.
Duesenberg Series J	Feb '50	Stutz Super Bearcat	Oct.
Lincoln (Cars of Character)	Dec '49	Stutz' Golden Age	Nov.
Mercedes S	Sep '50	"Sunset Blvd." Isotta-Fraschini	April
Rolls-Royce Silver Ghost	May '50	Willis-Knight	June
		Lincolns Unlimited	Jan '52
		The Packard Twelve	Feb '52

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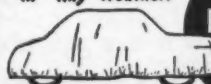
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## '52 Studebaker Motor Trial

(Continued from page seventeen)

take manifold, where it provides a faster warm-up; and, a seven-psi pressure water cooling system, to compensate for the reduced copper content core and to give the same cooling as before.

### Body Changes

No changes have been made either in the box-section, double-flanged frame, or in the coil-spring, independent front and semi-elliptic rear suspension systems; however, several obvious style changes have been made in the body: new grille, new hood, different tail lights. Another change, undoubtedly at the women's request, is the relocation of the tension spring in the trunk hinge to lessen the lifting effort.

### Interior Comments

An improvement made in the starter control is one that we asked for last year.

### GENERAL SPECIFICATIONS ENGINE

Type	Pushrod ohv V-8
Bore and Stroke	3½ ins. by 3¼ ins.
Stroke/bore ratio	0.96:1
Cu. in. displacement	232.6 ins.
Maximum bhp	120 @ 4000 rpm
Bhp per cu. in.	.516
Maximum torque	190 lbs.-ft. @ 2000 rpm
Compression ratio	7:1, 7.5:1 optional

### DRIVE SYSTEM

Conventional synchro-mesh, three-speed transmission  
Ratios: First—2.57 Second—1.55 Third—1.00 Reverse—3.48  
Rear Axle: Semi-floating, Hotchkiss drive, hypoid gears. Ratios: Conventional—4.09 Overdrive—4.55

### DIMENSIONS

Wheelbase	115 ins.
Overall length	197 ¾ ins.
Overall width	70 1/16 ins.
Overall height	61 ¾ ins.
Tread	Front—56½ ins. Rear—54 ins.
Tread/wheelbase ratio	1:2.08
Turns, lock to lock	5
Weight (test car)	3293 lbs.
Weight/bhp ratio	27.4:1
Weight/road hp ratio	37:1
Weight distribution (front to rear)	58.5/41.5

### CHASSIS DYNAMOMETER TEST

1200 rpm (full load)	22 mph	34.5 road hp
2000 rpm (full load)	35 mph	57 road hp
4100 rpm (full load)	70 mph	(max) 89 road hp

At that time the hood latch and starter control (on Automatic Drive cars) were both T-handles, located side-by-side below the dash, causing frequent annoyance when pulling the wrong handle. This has now been taken care of by means of a starter button on the dash. (Cars with standard transmission still have the starter located under the clutch.)

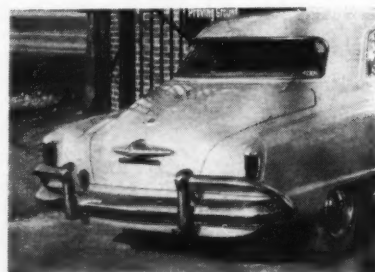
Two other minor criticisms we made last year concerned the closeness of the window crank to the steering wheel and the sometimes-difficult-to-operate door handles. These points were discussed with Engineering, with these answers: "In order to change the window crank we'd have to shorten the handle, which would increase the turning effort, or relocate the mechanism, which would necessitate die changes. Apparently most owners get used to this, because we've received very little complaint. Door handles are not a source of irritation, except on new cars where it takes more effort to open the door until the door seats."

Entry into the fairly wide front seat of

a four-door sedan is quite easy; but with an overcoat and hat on, it becomes somewhat difficult to enter the rear, due to the fact that the door does not open wide enough. Leg room and head room, both front and rear are adequate. Steering wheel position is good and all dashboard controls are within easy reach. Vision, since the first of the post-war Studebakers, is one of this car's best features.

### Interior Safety Check

As editorialized in previous issues of MOTOR TREND, we are quite concerned about car safety. Some things can be checked with figures (brake stopping distances), others are hard to pass on with-



MAJOR CHANGES in rear of Stude Commander are tail lights. Bumper extensions are extra

out a highly technical research lab (possible collapse of front suspension units, possible wheel breakage, etc.), still others are easy to overlook (dangerous knobs on the dash, blind spot to right rear, etc.). We give you the pertinent figures in our report of the car's performance and with this issue, we inaugurate a convenient "Interior Safety Check," consisting of questions about the car's safety and our answers. For each "yes" answer, the car receives 12.5 points, 100 points being ideal.

QUESTION	YES	NO
1. Blind spot at left windshield post at minimum?	X	
2. Blind spot to right rear at minimum?	X	
3. Positive lock to prevent doors from being opened from inside?		X
4. Does adjustable front seat lock securely in position?	X	
5. Minimum of projections on dashboard face?	X	
6. Is emergency brake an emergency brake and is it accessible to driver and passenger both?		X
7. Are cigarette lighter and ash tray both located conveniently for driver?		X
8. Is rear vision mirror positioned so as not to cause blind spot for driver?	X	
<b>TOTAL FOR STUDEBAKER COMMANDER:</b>		<b>62.5</b>

### And in Conclusion

This year we have even more respect for the prowess of the Studebaker Commander V-8, a really great performer. It's safe, it cruises nicely, has good accelera-



tion, is comfortable and economical to operate. Proof of our point will be found in the Stude V-8's Trend Trials No., which we expect to be very favorable and which will be printed in a forthcoming issue. Lack of sale price data as we go to press keeps us from computing the figure at this time.

#### TABLE OF PERFORMANCE

##### ACCELERATION TRIALS (SECONDS)

Standing Start 1/4-mile	:20.49
0-30 mph (low gear only)	:04.96
0-60 mph (through gears)	:17.16
10-60 mph in high	:19.30
30-60 mph in high	:08.04

##### TOP SPEED (MPH)

Calculated average of eight test cars (overdrive)	97.85
Calculated average of eight test cars (conventional)	87.57

##### FUEL CONSUMPTION (MPG)

	Conv.	O.D.
At a steady 30 mph	18.14	22.95
At a steady 45 mph	15.65	20.75
At a steady 60 mph	13.70	17.90

##### SPEEDOMETER CHECK

At 30 mph indicated 32 mph	6.7% error
At 45 mph indicated 49.5 mph	10.0% error
At 60 mph indicated 65 mph	8.3% error

## Rajo Returns

(Continued from page thirty-three)

tem: There is a separate set of intake ports, cast right in the head, plus a secondary carburetor and intake manifold. The secondary system comes into operation when you want extra acceleration, or at any throttle opening that you may choose. It steps up engine efficiency by providing better breathing, higher turbulence, and lower temperature.

Although time did not permit the running of fuel consumption checks, it may be inferred that the higher bhp per cu. in. of the Rajo-equipped engine will result in more miles per gallon, along with the greatly improved acceleration. After running exhaustive tests on one of his modified Chev engines at the Waukesha Engine Works, Joe was sufficiently convinced that he had a worthy successor to the "T" Rajo to tool for mass production. It will sell, as a complete kit, for \$169.50 tax incl., FOB your nearest dealer.

Joe Jaegersburger worked for the old Daimler Mercedes Company and studied engine design under Gottlieb Daimler's son. He quickly worked into the job of racing mechanic and he rode with Jenatzy in most of the great old capital-to-capital road races. He drove a Mercedes in the last of those races, the Paris-Madrid. When John Jacob Astor took delivery of a Mercedes from Jellenek in Paris in '06, it was Joe who taught him its intricacies. Astor signed Joe as his chauffeur and brought him to America. Here, Joe became a prominent racing driver and was at the first Indy "500" in '11 for the J. I. Case Co. A bad smashup caused him to abandon that reckless life and he brought out his first Rajo head in '19. He has made uncounted thousands of stock and special heads ever since. That's the background that stands behind the latest Rajo product; it's hard to match.

—Griff Bergeson

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At 500 Yds.	Battery	51.0	61.0	58.1	61.3
	Vertex	55.1	66.4	60.2	64.0
Top Speed Maintained	Battery	53.0	60.2	55.0	61.4
	Vertex	59.5	69.0	67.0	69.2

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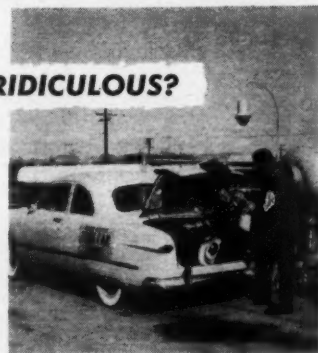
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March HOT ROD — on your newsstand February 15th

# SPORTING SCENE . . .

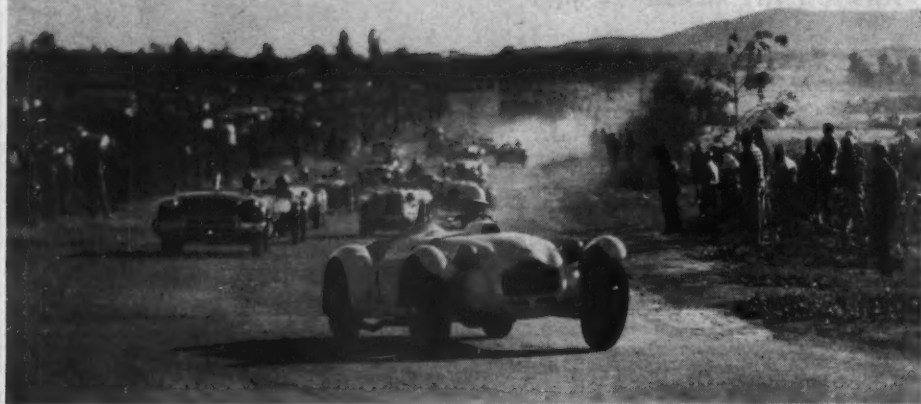


PHOTO BY JACK CAMPBELL

## • TORREY PINES

## • PALM BEACH SHORES

MICHAEL GRAHAM'S Cad-Allard led the pack at Torrey Pines, almost from start to finish of the 50-lap main event. Phil Hill's MG TC "2 Jr." had more speed but bad luck forced retirement

**T**HE FINEST RACE I've ever seen!" was heard all around the course at Torrey Pines, near San Diego, on Dec. 9. There the California Sports Car Club set a new precedent by inviting motorcyclists to participate in a race of their own—a 10-lap event over the 2.7-mile road course, as part of the day's racing.

The circuit itself was superlative in every way: two long straightaways gave the equipment a chance to unwind, plenty of sharp bends tested the skill of pilots and the roadability of machines. Gently sloping ground made unusually good crowd control possible and allowed spectators a view of almost the entire course. The view also included a 180-degree sweep of the blue Pacific—in all, an ideal setting.

From the moment you reached the pits on practice day you noticed an entirely new atmosphere. In addition to the familiar sight of all sorts of sports cars there were the motorbikes—the best of Ameri-

can, British, and Italian machines. And when they went, with the deafening roar of ultra-high-performance engines ringing in open megaphone exhaust pipes, a new sort of thrill was added to road racing.

The first event on Sunday was a race for stock 1500 cc machines, almost won by a sweetly running Jowett Jupiter, well driven by newcomer-to-racing Newton Small. He spun out on the last lap, lost to Virgil Strawn's MG TD. This 10-lapper was followed by a ladies' handicap race of five laps. Jo von Neumann, driving the family MG TD, handled her car coolly, had no difficulty keeping ahead of the second-place TC driven by Helen Livingston who came from Glenwood Springs, Colo. for the race. Then came the absolutely shattering start of the 10-lap motorcycle race as 30 machines flashed away at the fall of the green flag. Ed Kretz, Sr. and Jr., Triumph-mounted, battled away with such talent as Bonneville record-man Marty Dickerson (Vincent) and Don Hawley, the American lad who just returned from a victorious season of racing in England. But it was Jimmy Phillips, national T.T. champion, who had the skill, speed, and the mechanical endurance to ride his 40-in. Triumph into first place.

The grueling, 50-lap main event saw over 20 cars revving at the starting line, including such hot rod-sports car transition pieces as the Seifried and the Manning Specials. Possibly it was the inspiration of the immediately preceding motorcycle spectacle that accounted for the savage determination which seemed to possess every driver in this event. Phil Hill, driving

rugged little, V-8-60 powered 2 Jr., managed to run away from Michael Graham's Cad-Allard at will. However, Hill's machine failed to last the race and no one else could match the Allard's combination of pilot and power—Englishman Michael Graham took the day's top laurels, while Roger Barlow's reliable Simca, well-driven as usual, won the 1500 cc class. Sole sour note: the cyclists, who had contributed so much to the spectacle, were not at the victory dinner.

### ABRIDGED TORREY PINES RESULTS

#### SAN DIEGO CUP, 150 miles, 1501-8000 cc

1. Michael Graham, Cad-Allard, 2 hrs., 08:22.8
2. Don Parkinson, XK 120
3. Harry Steele, XK 120
4. Roger Barlow, Simca Special
5. Chuck Manning, Manning Special

#### MOTORCYCLE RACE

##### 650 cc-and-Larger Class

1. Jimmy Phillips, Triumph Thunderbird
2. Boddy Turner, Triumph Thunderbird
3. Marty Dickerson, Vincent Black Shadow

##### 500 cc Class

1. Don Hawley, BSA
2. Ray Arnold, Triumph
3. Allen Flint, Moto Guzzi

##### 350 cc Class

Only Finisher: Walt Harger, Velocette

### PALM BEACH SHORES ROAD RACE

**D**ECEMBER 8 AND 9 saw 20,000 spectators gathered on this tiny Florida island to witness two action-packed days of racing, notable for variety of events, a remarkably broad diversity of equipment, and the maiden appearances of several fantastic cars.

Biggest thrill of the weekend was supplied by John Fitch, who piloted Bill Spear's magnificent 4.1-liter (250 cu. in.)



JOHN FITCH sits at wheel of Bill Spear's Ferrari "America," easy victor of the Palm Beach Shores two-hour race for modified sports cars

# CALENDAR OF OUTSTANDING EVENTS

March 5—Sebring, Florida Miniature Le Mans  
Endurance Race, SCCA  
April 19, 20—Pebble Beach, California Road  
Race, SCCA  
May 30—Golden Gate Park, San Francisco Road  
Race, SCCA  
May 30—Indianapolis "500," AAA

Ferrari to uncontested victory in the Riviera Beach Trophy race for modified sports cars. This was the first successful appearance of what is very likely the greatest sports machine of our day. Two two-liter (122 cu. in.) Ferraris also ran and, remarkably enough, were only a couple of mph slower in average lap times than the winner, who made 60.6 mph for two hours around the difficult 1.9-mile course.

The race for 500 cc machines was a disappointment, bringing only four starters to the line, of which two were able to go the entire 15 laps. Both were Coopers, winner was Peter Dillnut, with an average of 54.05. It is becoming apparent that this class of machine requires unusually exacting preparation and extraordinary skill and discrimination on the driver's part.

Most interesting machine in the light car races was Max Hoffman's Montlhéry Porsche two-seater. Weighing just 900 lb. and putting out 80 bhp, this beautiful little car lapped the entire field of 14 entries before overheating and valve trouble forced its retirement in the 26th lap. Briggs Cunningham won the Kiwanis Trophy for up to 1500 cc stock cars at the wheel of a Porsche; Alfons Koster won the 91 cu. in. modified A. O. Edwards Trophy in an HRG. The winners both covered 53 laps in the two-hour race, averaging just over 49 mph.

The Hoffman Trophy race for stock XK 120s saw average lap times made which compared remarkably well with those made in the unrestricted sports car Riviera Beach Trophy. John Fitch was again the winner, averaging 55.51 for the one-hour event, almost tied by Karl Brocken, whose time was only .001 mph slower! MOTOR TREND's John Bentley was third with 54.5 average. This race brought 16 entries to the line. During the two days, 48 cars competed.

## COMING MOTOR SHOWS

- Feb. 5-10 2ND ANNUAL MOTOR AND ACCESSORY EXPOSITION, National Guard Armory, Daytona Beach, Florida.  
Feb. 19-24 NATIONAL ROADSTER SHOW, Exposition Bldg., 918 Fallon St., Oakland, Calif.  
Feb. 28-Apr. 2 PACIFIC AUTOMOTIVE SHOW, Pan-Pacific Auditorium, Los Angeles, Calif.  
Mar. 3-8 DENVER MOTOR SHOW, information obtainable from Chamber of Commerce, Denver, Colo.  
Mar. 29-Apr. 6 CUSTOM CAR SHOW, 1243 Elm St., Cincinnati 10, Ohio.  
Mar. 14-23 PORTLAND MOTOR SHOW, Pacific International Livestock Exposition Arena, Portland, Ore.



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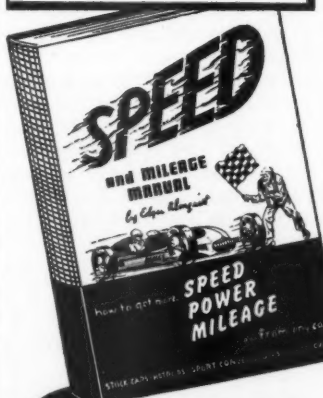
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## Mexican Road Race

(Continued from page twenty-five)

terrain; it has a lot to teach us about cars and about driving them that no other road race that I know can offer. Then there's the hope that this will really become an event for strictly stock cars and that we can all settle down to seriously improving production cars in the ways that they need improvement most. This is the modification to production car road racing that I had in mind at the beginning of this story.

### Stock Cars Mean the Most

The big hue and cry that's always raised when *strictly* stock cars for road racing are suggested is, "But they wouldn't be safe." I feel that that's a pretty weak argument. In the first place, if a machine isn't safe, drivers will use caution in both the selection and operation of their cars. Next, why shouldn't stock cars be safe?

After all, passenger cars do roll over at times—the tops should give protection without extra reinforcement. There are emergencies when almost every family car is driven fast, taken into turns fast—the car should be stable. We all need good brakes at all times—let stock brakes be less disgraceful than they usually are. In a word, why should you and your family be more expendable than competition drivers? Road racing offers the automotive industry a matchless test lab for the rapid improvement of its products. Another argument is this: as long as modifications are allowed, all you can prove is which is the best tuner-driver team. Therefore it can never be worth the industry's while to give this kind of racing its whole-hearted support. But if and when that support comes along, more dealers will enter cars, more drivers will get a ride, more money will be invested in a greater spectacle, the public's interest will soar with the opportunity to learn more about the performance of the cars it can buy, and the industry will have a

new incentive to build the best performance and safety features into its products.

I feel strongly that it would be wrong ever to exclude European cars from competition. We, too, can build efficient machinery if the incentive is there. This belief isn't inspired by Ferrari's rumored offer of a car for me to drive in '52. I expect to be there, but I hope that Clay and I will be in the cab of a 310-bhp Chrysler.

### The Organization Was Good

It doesn't take much imagination to realize that the ANA, organizer of this far-flung spectacle, had a complicated and gigantic job on its hands. The event was managed very well but, of course, there's always room for improvement. There was some question in many drivers' minds as to the justice of some disqualifications, also the apparent failure to disqualify when it seemed justified. The timing setup can be improved since timing errors weren't unknown in this race. All things considered, it was a very well-done job, with much credit going to the Mexican government and Army.

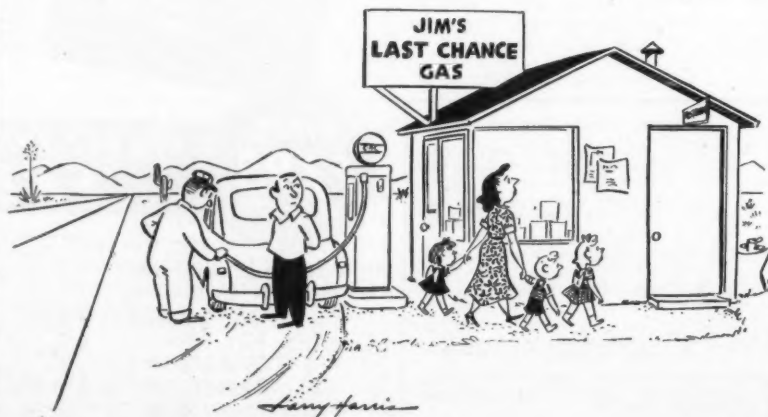
### THE TOP TEN FINISHERS

Driver	Make	Time
Taruffi	Ferrari	21h57:52
Ascari	Ferrari	22h03:56
Starling	Chrysler	22h13:46
Ruttman	Mercury	22h18:03
Trevoux	Packard	22h22:17
Teague	Hudson	22h41:40
Rogers	Cadillac	22h52:43
Crawford	Lincoln	23h04:06
Solana	Olds	23h12:29
Korf	Nash	23h12:49

### RESULTS BY MAKES

Make	Start	Oaxaca	Puebla	Mexico	Leon	Durango	Perote	Chihuahua	Juanes
Buick	2	1	0	—	—	—	—	—	—
Cadillac	6	4	4	7	3	3	3	3	3
Chrysler	14	11	8	—	—	—	—	—	—
Ford	2	0	—	—	—	—	—	—	—
Hudson	11	7	6	6	5	4	4	4	4
Lincoln	3	3	3	2	1	1	1	1	1
Mercury	4	2	2	2	2	2	2	2	2
Nash	5	4	3	3	3	3	3	3	3
Oldsmobile	23	19	13	11	9	9	9	9	9
Packard	8	5	5	5	5	5	5	5	5
Studebaker	5	3	2	2	2	2	2	2	2
Alfa Romeo	1	1	0	—	—	—	—	—	—
Delahaye	1	1	0	—	—	—	—	—	—
Ferrari	2	2	2	2	2	2	2	2	2
Jaguar	2	2	1	1	1	0	—	—	—
Lancia	2	1	1	0	—	—	—	—	—

—Troy Ruttman





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## Trends in Customs

(Continued from page nineteen)

agree when you see our pictures in a future issue.

The general trend in Radical designs can be summed up as follows: scoop grilles, also floating types (a floating grille is one in which the inset components appear to be floating or suspended in a scoop opening); bodies will be low of course, and short, especially on functional sports cars; finned rear fenders (a la Edwards Sports, etc.) are very popular now and will stay with us a while; there is a trend toward enclosing the front wheels completely, even on the sports cars (example: the Porsche aerodynamic sedan); in sports-type cars, removable hard-tops will be used in conjunction with a small canvas throw-over emergency top (MOTOR TREND called the shot a year ago); the majority of sports and sports-type cars will be two-four seaters, with emphasis on four-seaters.

### "Classic" Customs

I can't leave the Radical school without mentioning a new trend very much in evidence out here in California and, I suspect, soon to be evident in the East. Several "classic" custom cars are being built or have been built. These are copies of "classic" cars, made from stock components on stock old-car chassis. Examples: a copy of an English SS built of Masonite on a 1930 Chev chassis; a 1934 Ford roadster modelled after the Auburn Speedster; another '34 Ford, a convertible coupe, restyled to look like an English Jensen-body Ford; and a sports or sports-type (depending on its future performance) car being built around the 1936 Packard V-12 engine and chassis, with Cunningham styling. An interesting trend this, one that might be termed reactionary Radical, with apologies to semantic-minded readers.

### "Conservative" Customs

The second classification of custom cars is the Conservative. This is the term used by Barris, Ayala, and others when they talk about re-styling and customizing a production model car. A Conservative car is not built from the ground up; instead, a custom effect is achieved by making changes in a stock body. These changes may include channeling, chopping, sectioning, lowering—all the techniques which used to be applied to the "Customized, or Kustomized" car only. In other words, our terminology will change this year; restyled (de-chromed, no major body changes) and customized will both be Conservative Customs. As you can see by now, the terms Radical and Conservative, as used by the custom stylists, refer to the techniques used to create a custom car, not necessarily to the results. There will be conservative Radical cars as well as radical Conservative cars. How do you

achieve these paradoxes? Well, Al Ayala is working on something for re-styled stock model cars that could hardly be called conservative. I call it Super-Radical—it is: fluorescent paint jobs! Honest! That really glow in the dark! Right now, it's very expensive and Al isn't sure he's got all the bugs worked out, but he promises that fluorescent paint for cars will be available—and practical—within a short time. Al is also working on an amber paint, and has achieved a metallic orange, a long-sought-after color. You can see now why a de-chromed, very Conservative Chevy, unchopped, unchanneled, would be very "radical" just by the use of paint. But that's nothing. Here are some of the other trends that Barris, the Ayalas, Plemmons & Lindley, Coachcraft—and all the others—have evolved for 1952.

George Barris says: "Sure, the Italian school of design—for that matter, all European styling—will have some effect on American styling. They work under different conditions than we do here, however. They build Radicals. That's an advantage for them. We have to re-style a body already built; consequently, we work under limitations. We also have the law to deal with—there are a lot of changes I could make in a stock car if I didn't have to comply with various state vehicle regulations. The Europeans do not have this problem. But even with the handicaps I have to work under—high costs, high labor charges, the stock body—I still have enough ideas on customizing a car to make everyone in Los Angeles a different car. I've got new headlight treatments this year, new fender lines, new grille changes. I've got colors never seen on anything, let alone a car. I've got ideas on interiors—materials, colors, plating—I've never even approached before. No, I won't divulge these because my ideas are for sale."

Which is as it should be. George is still violently opposed to the continual copying that goes on of re-styling and customizing ideas. He points out that if everyone copies the same techniques, pretty soon all Conservative cars will look alike, just as stock cars look alike. At present, George is working on several cars, including a Jaguar XK-120, a Muntz Jet, and a Lincoln Continental. He will also do sports cars, using the Radical approach.

Gil and Al Ayala have separated their efforts, each working in his own shop on their individual theories of Conservative styling. Both will build up a Radical car on order, but they caution the custom car enthusiast to be sure of finances before considering Radical customs. "Too many people start a Radical job with me," Gil explains, "and, despite my warnings, get in too deep and have to quit. You should know your financial limits and be prepared to pay as the job goes along. Otherwise, you're wasting my time and your money—both of which are valuable. What work am I doing at present? I'm concentrating



on conservative Conservatives — de-chromed 51's, some sectioning, *no channeling*—it's too expensive for the average man and it interferes too much with the car's ride. My customers want a sharp, restyled car that rides well, not a sharp car they have to baby along. Lowering? Sure, but with a big difference. The car must be level, no more dragging rear. That's gone out of style, I think. I'm concentrating on good workmanship, neat appearance, at a moderate price. For \$300 to \$400, I can take the average '50-'51 Chev, Ford, Merc, and other makes as well, and give the guy a good-looking car. For \$2000, I can *really* go to town and give him something exceptional."

Al Ayala says: "Trends? Well, everyone seems to be on a sports-car kick. They like Jags. Nash-Healey, that styling. I can give them sports car styling, but that Radical construction is still expensive, although I can think of several ways it might be beat. Custom techniques I'm using are: exhaust through the rear fenders and deck; all external fittings recessed or push-buttoned—that's still popular; rear fenders finned or brought out; tops chopped slightly and flattened to take out the bulge; hood brought down to fender level; front wheels fully skirted, back wheels also, windows brought down to waist level—that Kaiser sedan is on the right track there—and COLOR! That's the way to customize a car inexpensively. There are hundreds of combinations, styles; millions of colors to play with. Interiors, too, can be glamorized inexpensively and with great effect. Plating—there's where we can make many interesting changes by re-positioning trim and particularly, using different plates. I'm doing a '36 Ford now, in which I'm using copper everywhere, including the grille."

#### Other Custom Creators

Plemmons & Lindley have been in the custom business quite some time but have not been accorded the space they deserve in our reports on the custom field. I have already described their Radical creation. In the Conservative bracket, they like to stick to plain, de-chromed styles with extremely simple floating grilles of their own construction. They have just received a 1951 Kaiser sedan from an old customer and they plan a complete re-styling of this car. The top will be lowered and a Bel-Air type rear window will be installed. The rear fenders will be lengthened and the spare will be set into a recess in the deck for a continental-style mounting. The car will be de-chromed completely, headlights frenched, and a new grille installed. This firm believes that grilles should be *constructed* for the custom car, not merely transplanted from another make. I might mention that on their Radical car, they plan to construct three grilles, any one of which may be installed in a few minutes by the owner when he is tired of the ap-

(Continued on page forty-seven)

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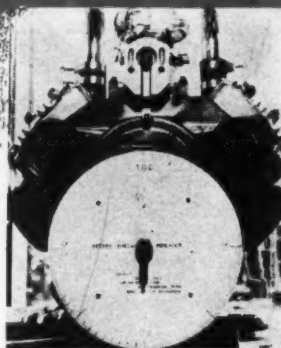
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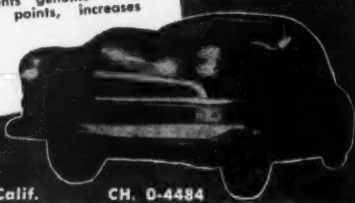
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# OVERSEAS NEWSLETTER

by A. Devereux



## • FOREIGN CAR PERFORMANCE

## • MERCEDES REVIVES LUXURY LINE

## • GRAND PRIX OUTLOOK

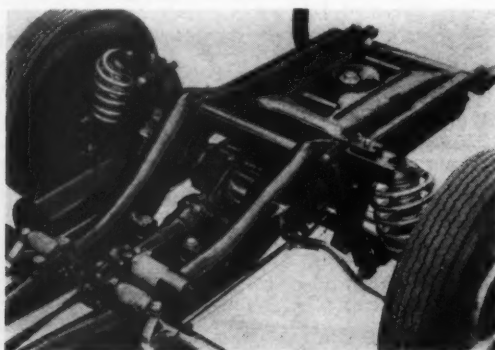
**I**F YOU READ the revealing analysis of American production cars in February's *MOTOR TREND*, you may have been struck by—or you may have taken for granted—the all-round superiority of the few best-engineered makes. Chrysler, for example, had not only the best acceleration and the best top speed, but also the best brakes and the best figure in ton-miles per gallon.

The table on this page, based on figures provided by the excellent and irreproachably impartial road tests conducted by *The Motor* (London), has an entirely different story to tell. Each of the overseas cars tested is designed for a *specific* job, rather than for a *variety* of jobs, like U.S. cars.

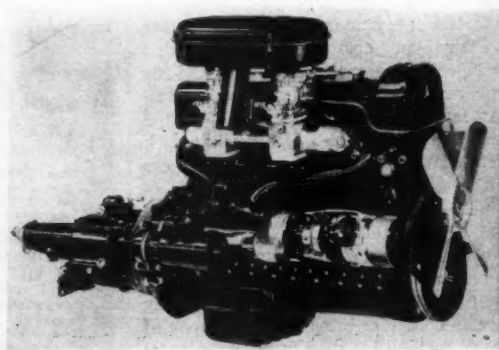
Look, for example, at the ratings of the Fiat 500 C and the Morris Minor. The figures for both their actual fuel consumption and their ton-mpg are higher than those of any of the American cars *MOTOR TREND* tested. But in the first two categories they're battling for bottom honors. And the Cad-Allard's neck-snapping acceleration and fine top speed—again, higher than those of the best-rated American stock cars—are offset by its low, low mileage



MERCEDES 300 S is available in this convertible body, also five-passenger sedan. Both are worthy successors to this make's pre-war luxury cars, employ ohc engines not used since 1932



HYPOID BEVEL gear rear axle is standard on new Mercedes for the first time in a German car. Supplementary springing for rugged road conditions is push-button controlled from dash



MERCEDES engine is available in one, two, or three carburetor form, giving range of output from 115 to 150 bhp. Top speed: 109 mph, better than that of supercharged 5.4 L, pre-war 540 K

ACCELERATION OVER STANDING 1/4 MI. IN SECS.	TOP SPEED IN MPH	AVERAGE FUEL CONSUMPTION IN MPG	TON MILES PER GALLON
Cad-Allard J-2 (332 cu. in.) 16.25	Cad-Allard J-2 110.8	Fiat 500c 47.7	Sunbeam Talbot 43.6
Morgan Plus Four (128 cu. in.) 19.7	Bentley Mark VI 100.0	Morris Minor 36.6	Fiat 500c 40.9
Bentley Mark VI (278 cu. in.) 19.7	Austin A-90 86.1	Triumph Mayflower 30.2	Morris Minor 39.9
Jowett Jupiter (91 cu. in.) 20.5	Jowett Jupiter 86.1	Simca Aronde 29.9	Wolseley 450 39.6
Austin A-90 (162 cu. in.) 21.1	Wolseley 680 85.3	MG Sedan 29.5	MG Sedan 39.5
Humber Super Snipe (249 cu. in.) 21.7	Morgan Plus Four 84.7	Wolseley 450 26.2	Triumph Mayflower 37.4
Ford Zephyr Six (138 cu. in.) 21.8	Sunbeam Talbot 84.5	Ford Consul 25.4	Austin A 90 36.5
Singer SM 1500 (91 cu. in.) 22.0	Humber Super Snipe 81.6	Sunbeam Talbot 24.9	Simca Aronde 36.5
Wolseley 680 (135 cu. in.) 22.0	Ford Zephyr Six 79.8	Morgan Plus Four 24.9	Wolseley 680 36.3
Sunbeam Talbot (138 cu. in.) 22.4	Fiat 1400 74.4	Jowett Jupiter 24.4	Bentley Mark VI 36.1
Simca Aronde (74 cu. in.) 22.7	Simca Aronde 73.9	Singer SM 1500 24.1	Ford Consul 35.8
Citroen Light 15 (116 cu. in.) 23.2	Singer SM 1500 72.7	Fiat 1400 24.0	Humber Super Snipe 35.3
Panhard Dyna (45.5 cu. in.) 23.4	Ford Consul 72.6	Citroen Light 15 23.5	Fiat 1400 34.5
MG Sedan (76 cu. in.) 23.8	Citroen Light 15 72.6	Wolseley 680 22.0	Citroen Light 15 33.3
Ford Consul (92 cu. in.) 24.1	Wolseley 450 70.7	Austin A-90 21.6	Ford Zephyr Six 28.7
Wolseley 450 (90 cu. in.) 24.3	Panhard Dyna 70.3	Ford Zephyr Six 19.5	Jowett Jupiter 28.5
Fiat 1400 (85 cu. in.) 24.3	MG Sedan 69.6	Humber Super Snipe 16.2	Morgan Plus Four 27.1
Triumph Mayflower (76 cu. in.) 26.1	Triumph Mayflower 62.9	Bentley Mark VI 16.2	Singer SM 1500 26.5
Morris Minor (56 cu. in.) 27.6	Fiat 500c 60.3	Cad-Allard J-2 13.6	Cad-Allard J-2 18.4
Fiat 500c (35 cu. in.) 28.0	Morris Minor 60.1		

and ton-mpg rating—lower than the lowest in MOTOR TREND's analysis. Look again at the table and you'll see that this seesaw sort of balance is characteristic of most of the cars; the only makes approaching all-around good performance are such middle-of-the-roads as the Austin A-90, the Sunbeam-Talbot, and the Simca Aronde, whose performance in all categories is adequate, if not stunning.

There are, however, some comparisons to be made that might well give Detroit's manufacturers to think. It's somewhat jolting to realize, for example, that the lusty little Morgan, with its 128 cu. ins., gets quicker acceleration from 0 to 60 mph than any American car MOTOR TREND has tested: 14.1 seconds, compared to the 14.4 of the U.S.'s hottest, the Chrysler V-8. And the Jowett Jupiter's 91-cu.-in. en-

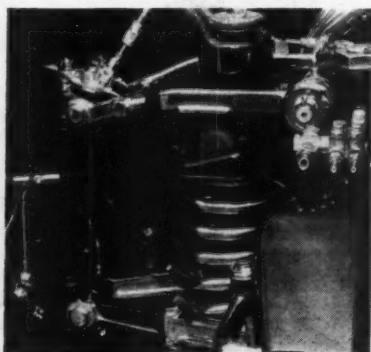
gine pushes it through the standing quarter-mile in 20.5 seconds, ahead of MOTOR TREND's fourth-ranking Studebaker.

Top speed is not the forte of the notoriously underpowered overseas jobs, except in such special cases as the Cad-Allard and the Bentley (which is advertised, if not often thought of, as "the silent sports car"). In Europe a speed of over 80 mph is usually associated with a sports, rather than a transportation vehicle. The fuel-starved Europeans do, on the other hand, build cars that pinch pounds and pennies. America's least hungry gas-eater, the Studebaker, gets an average mileage of 21.4, a figure which would put it well toward the bottom on the overseas list. And in the extremely significant ton-mpg category, which indicates an engine's efficiency in using the fuel it consumes regardless of the size of the engine or the weight of the car, the rating of the Sunbeam-Talbot, which is *not* an economy car, is far better than that of America's top-ranking Chrysler.

Obviously, where fuel economy is essential, overseas products have an appeal that American cars don't have. But just as obviously, for good performance on all counts the best American cars are way ahead.

'52 PROGNOSIS: The old names will be back in the news this year. There's rumor rampant to the effect that Bugatti will enter a works team and a new car at Le Mans this year. The new Bug will be powered by a 1.5-liter (91 cu. in.),

(Continued on next page)



TYPE 300 front suspension is by frictionless soft coil springs and telescopic shock absorbers. Note the extremely substantial forged A-arms

March 1952

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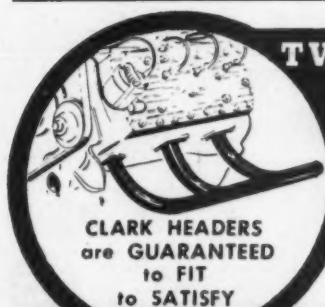
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## Overseas Newsletter

(Continued from page forty-five)

16-valve, four-cyl., aluminum-block engine.

And the racing world is waiting to see what will roar out of Stuttgart this season—if anything. Mercedes is building a new Grand Prix car, but whether it will fit the present formula, which has only two years to go, or the new one, which will become officially effective in '54, nobody outside the factory knows.

Chances are, though, that the present formula will see its last season this year, official dates notwithstanding. Alfa-Romeo, whose four G.P. wins to Ferrari's three last year were a shattering comedown from pre-'51 days, is said to be about to abandon its Alfetta. The word is that Alfa will put it through the motions on the G.P. circuits this season, but that the real work will be going on at the factory: preparation for 1953 of a car built to the specifications of the new formula. And if Alfa jumps the gun, the other manufacturers will probably follow.

There's a fascinating field for speculation in connection with the new formula itself—2.5 liters (152 cu. ins.) unblown. 750 cc (45 cu. ins.) blown. The familiar G.P. contenders will probably concentrate on the larger displacement, even though Alfa's engineers have asserted with confidence that given a couple of seasons of development they could get performance from blown 750 cc machines that would closely approach that of the present Formula I cars. But for the first time in Formula I racing, engine displacements are approaching those that have been used for years in G.P. motorcycle competition, and one wonders if the new formula mightn't be a challenge to some new contenders. Will post-'52 seasons see **AJS, BMW, Gilera, NSU G.P. racing cars?**

**FIRST POST-WAR Mercedes** of what its makers call "the international super-class" is the Type 300, a handsome, conservative, thoughtfully engineered quality car. As a matter of fact the degree of quality displayed in every detail of the Type 300 is so unusual in this era of plastic radiator ornaments that the car does indeed fall into a "super-class."

Look at the accompanying front-suspension detail. The A-arms—wishbones—are of a kind of quality construction that has almost disappeared from the automotive scene. While most manufacturers are stamping these units from relatively light sheet stock, Mercedes relies upon fine, heavy steel forgings. Note, in the same detail, the frame-tube to the right of the coil spring; although its walls are thin and its weight slight, its great strength has been proved by some of the most famous machines in motor racing history. We'll have more to say about this next month.

—A. Devereux

Motor Trend

## Trends in Customs

(Continued from page forty-three)

pearance of his car. This interchangeable grille idea seems to be a very important trend; Barris is using it along with other custom designers.

The most conservative of Conservatives is, of course, Coachcraft, Ltd., of Hollywood. Here, Burt Chalmers is still designing and building custom cars in the best traditions of American classic coachcraft. Burt's shop will construct many of the formal customs done on American chassis this year in the U.S., as will the famous firm of Derham Bodies in Pennsylvania. (Before I forget it, Derham has come up with the most interesting custom styling accessory of the year. It is a wickerwork panel that fits between the chrome spear and the top door sill on the Buick Roadmaster—a very striking installation which I predict will appear on many other cars this year.) Burt believes in preserving the identity of the car as much as possible. De-chroming should be a means to an end, he claims, not just an end in itself. As with Derham's wickerwork, Burt believes that trim can be added to today's car, as well as taken off. "Re-located" would perhaps best describe this idea. The chrome trim and molding line on many Detroit products is not in the place where it will do the most good. Take it off, design correct trim—both in chrome and in other materials—then place it on the car where it will make sense, not create confusion. Burt also receives many calls to "personalize" a car by the discreet placement on the car of the owner's initials, crests, and other individualized marks of ownership. Coachcraft will not attempt a Radical car—sports or otherwise—for less than \$12,000-\$15,000. Burt feels that this is the lowest price he can quote for a completely custom car which will satisfy his own concepts of design and quality as well as his customer's. Nothing but the absolute best can go into a Coachcraft production; if that is what a customer wants, then Coachcraft will build it.

### Custom Trend Predictions

Space does not permit a detailed report from the many other custom shops in the U.S., but I can give you a round-up of the many trends predicted by those mentioned above and other individuals and shops. Look for all of the following ideas to appear on custom cars this year, wild as some may sound at this moment.

Besides the rear deck-mounted spare—the continental-type—look for the old classic front fender-mounted spare or spares to appear again.

Coachcraft predicts the return of the wire wheel as styling accessory on stock cars . . . a European influence and one which may become a functional change as well as a style.

Watch for a big increase in electrical gadgets. Photo-electrically controlled doors; a photo-electrically controlled dimmer switch (this is rumored to be in production) for headlights; polarizing-light attachments for windshields and glass roofs, which will reduce glare. (A glass top for convertibles is rumored to be in production. It consists of two sheets of polarized glass, one of which may be rotated to obtain any degree of transparency.)

Moisture-controlled windshield wipers and convertible tops are sure to appear on the accessory scene—this is a result of General Motors gadgetry on Le Sabre. (Moisture, striking a sensitized surface, actuates a switch.) Also from Le Sabre, the radio on-off switch will raise and lower the antenna. From the XP-300, expect adaptations of the air-cushion adjustable seat.

Watch for a revival of the old swivelling drive-lights that follow the front wheels (although these are outlawed in some states).

Besides the wickerwork panels mentioned above, other materials will appear as trim on exteriors. A custom English Daimler, recently exhibited, had thousands of tiny gold stars on the doors and rear quarters. I predict that novel cloths and plastics will be used this way.

Look for these general trends in customizing: gook-wagons will fade in popularity for lack of chrome accessories due to the war, if for no other reason. Most customs will depend on very simple overall lines augmented by startling paints, bright interiors, and novel but sparing trim. Watch the window size go up—the older custom customer wants a car he can see out of. Small changes—such as license plate position, tail-light type and position, headlight fenching—will be starting points, not ends in themselves. Wheel discs, grilles, interior and exterior trim, will be copper, gold, spun silver, even colored metal (like those spun aluminum glasses now used in households). Cars not often customized—such as Studebaker, Kaiser, Nash, Crosley, DeSoto—will become very popular for restyling because of their different body lines. Among the Radical cars, there will be some extreme experimentation with power plants (steam, possibly electrics, maybe gas turbines), suspensions, and other mechanical features.

### A Radical Car of the Future?

And I know of at least one completely radical Radical car which will be on the highways this year. It will be a glass-roofed (polarized control), tear-drop coupe in styling. Its extreme radicalness will be in its power and controls; gas turbine for power, and for controls a single joy-stick—a la aircraft. Push the stick forward to accelerate; pull back to stop (power-vacuum assisted brakes). Push the stick to right or left to steer (power-steering). Now you can say you've heard everything.

—George Finneran

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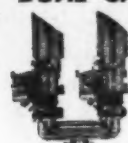
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SELL—German BMW parts, have transmissions and engine parts. Want to buy BMW 328 engine, also BMW emblems and grill parts. R. Brouett, 4712 Fulton Ave., Sherman Oaks, Calif.

SELL—Terific supercharged '36 Auburn roadster, 24,000 miles. Family heirloom, incomparable in U.S. New six-ply Firestones, safety tubes, leather, engine, everything immaculate. Best offer nearest \$1500. J. F. Steink, P.O. Box 143, Greenville, Ohio.

WANTED—New or used open tube rear end, with quick change center section, gears, brake drums, and axle bearing carrier brackets for cross-spring suspension and radius rods. D. Sayson, 750 N. 98th St., Seattle 3, Wash.

WANTED—'20 to '24 four-cyl. Essex, must be in good condition throughout. Answer, giving price and condition. J. Reynolds, Box 29, Clinton, N.C.

SELL—A large assortment of used parts for various classic vintage cars '24 to '36. S. Adelman, 635 S. Columbus Ave., Mount Vernon, N. Y.

SELL—'37 Cord supercharger with manifold. Condition appears to be good. \$100. F. J. Dominianni, 79 East Merrick Rd., Valley Stream, N. Y.

SELL—Model T. Rajo overhead valve assembly, complete with carb, manifold and valves, push rods, etc. \$150. F. J. Dominianni, 79 East Merrick Rd., Valley Stream, N. Y.

WANTED—Front bumpers and rear bumperettes for '28 four cylinder Dodge Brothers sedan. Also four outside door handles for same. Finish must be good on articles. L. Nelson, Sherwood, N. Dak.

SELL—'51 latest Jaguar XK120 body, metallic green, two-tone green leather seats, carpets, hood, improved top, windshield, instruments, lamps, chassis, frame, wheels perfect. \$1500. J. Bentley, 52 West 54th St., New York 19, N. Y.

SELL—'50 MG-TD, never been raced; radio, heater. Unable to deliver, going into service. Priced for quick sale, \$1350. J. P. Wacett, Box 57, R. 1, Ada, Mich., Phone Grand Rapids 83625.

SELL—'37 Cord phaeton completely rebuilt. Also extra parts with car. \$1250. R. Swan, 6051 33rd Ave., Sacramento, Calif.

WANTED—Late-model sports car, may be open or closed. Swap '37 Cord phaeton plus cash or buy outright. R. Swan, 6051 33rd Ave., Sacramento, Calif.

SELL—'33 classic Cadillac V-8 conv. coupe. Completely restored with all original appointments. New top, upholstery, and lacquer finish. Excellent mechanical condition. Pictures on request. R. R. Davis, 2444 Graydon Ave., Monrovia, Calif.

WANTED—'37 Cord supercharged conv. Send photo, price and state condition. A. Nusser, 931 Cumberland St., Lebanon, Pa.

SELL—Gleaming green five-passenger British Triumph conv. Whitewalls, heater, folding rear windshield, distinctive flowing lines. Excellent condition throughout. \$1750. J. D. Boer, 441 Roehampton Rd., San Mateo, Calif.

SELL—'30 Packard custom deluxe sports coupe. A beautiful classic interesting features. Best offer over \$400. Also old model car parts. C. T. Taylor, 380 Pendola Rd., El Paso, Texas.

SELL—Parts for '38 Chrysler C19 or C20, including rebuilt engine and clutch, special-built transmission, overdrive, drive shaft, 7.00 x 16 six plies, puncture proof tubes. C. T. Taylor, 380 Pendola Rd., El Paso, Texas.

WANTED—One of the following in restorable condition, preferred four-cylinder open body: Buick, Durr, Durant, Chevrolet, Ford, Essex, Chrysler, Star, Dodge, Overland, Whippet, etc., models from '12 to '27. J. W. Rancier, 909 N. Dartmouth, Albuquerque, N. Mex.

SELL—One Cord Beverly sedan, body stripped, have hoods and louvers, Cord radio, Auburn two-speed axle. Best offer on all parts and body. D. White, 1325 Fruitvale Ave., Oakland, Calif.

SELL—'37 V-8 La Salle four-door sedan. Perfect chrome, new tires, radio, everything original. 61,000 miles. Photos on request. Very good interior. \$350 L. Richards, Rt. 3, Harvard, Ill.

SELL—'38 Packard Super Eight victoria conv. Original owner, very fine condition. E. Tobey, 11244 Homedale St., W. Los Angeles 49, Calif. Arizona 9-6246.

SELL—'38 Packard conv. sedan, nearly perfect condition. E. Tobey, 11244 Homedale St., W. Los Angeles 49, Calif. Arizona 9-6246.

SELL—'39 Packard 12 custom seven-passenger, vacuum brakes, and clutch. Completely overhauled by Packard, new brake lining and cylinders, new cold rubber re-reads, 8.25 x 16. F. J. Wiseman, 1318 Linden Ave., Glendale 1, Calif. Charleston 0-5762.

SELL—'28 Mercedes-Benz four-door conv., body by Saatchik on the model K chassis with the 200 hp supercharged engine. Beautiful restored condition, \$950. F. P. Thorsen, 11353 S. W. Military Rd., Portland 1, Ore.

SELL—'48 Hudson Commodore conv. bought in '49. Ivory lacquer, filled, grille, lowered. Electric windows, radio, heater, whitewalls, spotlights. Has had best care. Owner in Navy, \$1900. R. J. Carpenter, Box 301, Santa Fe Springs, Calif.

WANTED—Model T Ford roadster, any year from '13 to '25. Must be in good or restorable condition. Reasonably priced, send information and pictures. R. Robinson 301 West 125th St., New York 27, N.Y.

WANTED—Steam car or steam car engine and parts in any condition. Prefer Stanley, Doble or White. E. B. Lusier, Hylebos Star Rt., Tacoma, Wash.

SELL—'30 La Salle seven-passenger touring sedan. Beautiful, original black paint. Excellent mechanical condition, needs top, \$200. F. Corbett, Clearwater Ave., Lindenhurst, L.I., N.Y.

SELL—'26 Ford T roadster, all original and in exceptionally clean condition. Strictly stock. Will sell outright or trade for V-8. V. Albeck, 523 W. Huntington Dr., Monrovia, Calif.

SELL—'38 Cadillac V-8 7519, mechanically excellent, all new tires, good interior, little body work needed. Luxurious riding qualities. Photo available, best offer over \$400. C. R. Larsen, 11 Wau-goo St., Oshkosh, Wisc.

SWAP—Two 155 hp Franklin experimental aircraft engines, one complete, other cracked, for parts only. For best deal on sauged Mercury engine. F. V. Torgeson, Box 543, Elkhart, Ind.

WANTED—Set of chrome Cord hub-caps and front and back bumpers. M. Taylor, 1808 Cliff Hill Dr., Monterey Park, Calif. Union 14142.

SELL—Brand new V-8 60 midgeet Hilligass body, tube front, light rear, gear box, four changes, engine has chromed cylinders, Pounden magneto, Edelbrock heads and manifold, Winfield cam. L. Argersinger, Chittanooga, N.Y.

WANTED—Stanley Steamer or Doble Steam Car or other makes that can be rebuilt. C. E. Schenck, Box 271, Station A, Atlanta, Ga.

SELL—'37 Cord conv., not running, plus complete parts to build another, including conv. body in good shape. Will sell all or any part thereof. S. Sarra, Jr. 2842 Vista St., N.E., Washington 18, D.C.

SELL—'09 Autogub, two cylinder high wheeler, restored and running, beautiful paint, original leather upholstery, top, lamp, bulb horn, \$600. H. B. Johnson, 3671 Leland, San Pedro, Calif.

SELL—'38 custom-built Super Eight Packard four-door sedan. Perfect mechanical condition and paint. Eight tires, four new. Actual mileage 36,000. H. P. Landrock, Box 464, Bethlehem, Pa.

SELL—'12 Leland Cadillac '30 roadster, four cylinders, R.H. drive, good running condition, any reasonable offer or trade. T. E. Sumner, 9231 2nd Ave. N.W., Seattle, Wash.

SELL—So. Calif. Equa-Flow exhaust systems, complete less mufflers. Like new, for '50 or '51 Cadillac. \$50. Call collect if interested. F. H. Eiler, 2452 E. 72nd St., Chicago 49, Ill. South Shore 8-0020.

SWAP—\$1500 appraised diamond ring for MG, Rolls, Cord or sports car of like value. C. Taylor, Box 1003, Bakersfield, Calif.

SELL—'34 Packard 12, Dietrich conv. victoria. Excellent condition, and regular use. Original price over \$6000. Price \$395. C. W. Harris, 2129 Sylvan Way, Apt. A-2, Atlanta, Ga.

SELL—'48 MG-TC, 18,000 miles, black baked enamel with red wheels, radio, heater, new top, new tires, and other extras. \$1150. M. M. Cooksey, Niskey Lake, Ben Hill, Ga.

SELL—Duesenberg parts. R. Brule, 120 W. Main, El Cajon, Calif.

SELL—'47 Lincoln Continental cabriolet, beauty, metallic green, new top, new white sidewalls, overdrive, green leather seats, 39,000 miles, good condition. \$2000 or best offer. Lt. E. M. Dugan, Godfrey, Ill.

SELL OR SWAP—Dismantling '32 Hispano Suiza. Also two Graham superchargers. Want Italmeccanica or similar type supercharger and other speed equipment for Ford V-8. G. Fairbanks, 54 Oakland Ave., Westmont, Que., Canada.

WANTED—'41 or older Lincoln Continental in restorable condition. Also correspondence with Lincoln Zephyr fans as I have lots of Lincoln Zephyr parts. D. J. Haymes, 603 Grant St., Iowa City, Iowa.



**SELL**—Parts for Dodge, Packard, Buick around '25 to '30 models. '32 Buick engine, transmission for '37 Packard 12. C. T. Taylor, 380 Pendale Rd., El Paso, Tex.

**WANTED**—Antique auto 1900 to '20 restored or in restorable condition. Give full information, model, year, condition and price asked. T. Hofmeister, 10 East Overlea Ave., Baltimore 6, Md.

**WANTED**—'10 to '20 Stutz restored or unrestored. Give full information, model, year, condition and price. Will pay cost of photo. T. Hofmeister, 10 Overlea Ave., Baltimore 6, Md.

**SELL**—'36 un-supercharged Cord Beverly sedan. New paint, looks good all around, 63,000 miles. Mechanically sound. Want appreciative owner. \$650. E. E. Holmes, Jr., 1811 Telegraph Ave., Stockton, Calif.

**SELL**—'37 Cord parts, 33,000 original miles, complete engine, transmission, late joints, special rear axle, H.D. heads, misc. equipment, fine condition. \$200 plus shipping and crating. J. C. Abbott, 1822 Westwood Blvd., Los Angeles 24, Calif.

**WANTED**—'36 Ford roadster body in decent condition. Upholstery unimportant. Preferably within 200 mile radius. Send complete information. B. Wescott, North Chatham, Mass.

**SELL**—'09 Maxwell two-cylinder runabout, all original lamps, tires, fair running and licensed in Pa. for '51. Price \$600. W. W. McLaughlin, 1242 Wisconsin Ave., Pittsburgh 16, Pa.

**WANTED**—Leland Lincoln touring. Must be in good condition. Price, details and photo in first letter. J. M. O'Brien, MD, 735 Clinton Ave., Bridgeport, Conn.

**WANTED**—Set of four or five white sidewalls size 8.20 x 15. Prefer Goodyear Super Cushion or Double Eagle. T. Kavanagh, 227 S. Ashland Ave., Lexington 37, Ky.

**SELL**—Mallory coil and distributor for Oldsmobile Rocket. Thompson Products Vitameter for best offer. T. R. Rose, 1114 Genesee Ave., Warren, Ohio.

**WANTED**—Rolls-Royce, any body style or classic phaeton, any make. Reasonably priced; in Southern Calif. area. Will swap '32 Ford B coupe, stock, as part payment. G. E. Williams, 6553 Newcomb St., San Diego 11, Calif.

**SWAP**—Lincoln Continental conv., fully equipped and in perfect condition. For late model, never raced, MG. Please send details and photo. R. Moses, 1252 Pineview Rd., Green Acres, Birmingham, Ala.

**WANTED**—Brass Gabriel exhaust whistle. Also interested in other antique car accessories, such as foot warmers, lamps, horns, motometers, old catalogs, etc. Write description and price. P. W. Morgan, 1122 Union Ave., Brackenridge, Pa.

**SELL**—'30 V-8 Cadillac sedan. Body perfect. Needs some mechanical work, but is in running condition. Will also consider trade. E. R. Leyendecker, 56 Cornwell Ave., Baldwin, N.Y.

**WANTED**—Parts for a '30 Cadillac V-8 sedan, especially a wheel. E. R. Leyendecker, 56 Cornwell Ave., Baldwin, N.Y.

**SELL**—Late model McCulloch supercharger for Ford or Mercury. Recently rebuilt, complete with ball bearing, water pumps and three belt crankshaft pulley. \$125. G. Hunter, 716 1/2 W. Main St., Medford, Ore.

**SELL**—'32 Lincoln V-8 model F A club coupe for parts. Car is now being dismantled. L. R. McCormick, 3211 SE 52 Ave., Portland 6, Ore.

**SELL**—OR SWAP—Dual manifold and Stromberg carb. B.X.O.V.-2 for '49 Ford six. For the same or heads for '50 Mercury eight. B. G. Rowan, 2709 A. Nat. Ave., National City, Calif.

**SELL**—'30 Peerless, four-door eight cyl. standard sedan. Complete and in excellent condition. \$175. Duryea, 300 Penna. Ave., Roosevelt, N.Y.

**SELL**—'25 Studebaker coupe in perfect condition. All original, used every day. You pay freight. Will send photo. Bob, c/o Union Oil Station, 3201 Stockton Blvd., Sacramento, Calif.

**SELL**—Starter, generator, instruments, front end and four wheels and tires, some glass, other parts to '37 Lincoln custom limousine, Judkins body. Make offer. J. T. Fass, Box 57, Grand Rapids, Ohio.

**WANTED**—'20-'21 or '22 Stutz Bearcat, four cylinders, 16 valves, double ignition, wire wheels. Must be complete and in good running condition. Write Governor G. Persons, State Capitol, Montgomery, Ala.

**WANTED**—Early '20 Mercer roadster. In fair condition or better. For cylinder job. C. I. Fuller, Jr., 3220 Broad Ave., Altoona, Pa.

**SELL**—Auto sales catalogs; Packard, Cad, Lincoln, etc., min. \$5 each. For details, send large stamped addressed envelope. A. Twolby, 400 N. Kenmore, Los Angeles, Calif.

**SELL**—'47 Ford 1/2 ton pickups, never used, cost \$2950 each. Radio, heater, overdrive, power brakes, auxiliary springs, special shocks, many other extras. Sacrifice \$1495 each. A. W. Shamen, 2444 S. Orkney St., Philadelphia 48, Pa.

**SELL**—'11 Model T Ford touring, complete, partially restored. \$385. C. S. Hiser, 1426 Wells St., Fort Wayne 7, Ind.

**WANTED**—Book issue of Road and Track for June '47, May, June and Aug. '48, Dec. '49 and Jan. '50. Will pay any reasonable price. Any condition. A. Brodsky, 2751 W. Glendale Ave., Chicago 45, Ill.

**SELL**—McCulloch supercharger complete, in excellent condition. Fits '37-'48 Ford or Mercury. \$100. J. H. Posser, Rt. 1, Omro, Wis.

**SELL**—'28 model A chassis only, built piece by piece from floor up, better than new, runs marvelously. \$350 or will swap. W. Post, Kitty Lee Inn, Bishop, Calif.

**SELL**—'26 Buick four-passenger coupe, intelligently stored since '30, tires, paint, upholstery, performance original and perfect. \$350 or swap for perfect T. W. R. Sturgeon, 53 E. Tacoma, Clawson, Mich.

**SELL**—'51 four-passenger Volkswagen conv., 5000 miles, beautiful custom body by Kuhlmann. Only four in U.S. Cost \$2300, deliver anywhere in US for \$1750. W. R. Sturgeon, 53 E. Tacoma, Clawson, Mich.

**WANTED**—'28 Dodge fast four roadster with two-unit starter generator, wire wheels and rumble seat. Send pictures and price list in first letter, photos returned. M. Stansbury, Box 101, Mount Shasta, Calif.

**WANTED**—Roots-type blower and 8:1 aluminum heads for '49 Ford block. Will swap radio and amateur radio equipment and parts for above. State price or swap and condition. W. Almick, 128 Devon Terrace, Kearny, N.J.

**SELL**—'24 Chevrolet touring being restored. Very good tires, usable spares, \$100. Extra parts free with car or sell separate. Make offer for parts desired. W. A. Kernaghan, Rt. 1, Grand Junction, Colo.

**SELL**—'37 Lincoln K series seven-passenger, excellent, 10 tires, 254 Ford engine, four speed transmission new. Also Lincoln V-12 engine parts, K series engine no. 7818. A. L. Jarred, Box 545, Isleton, Calif.

**WANTED**—'36 Ford roadster or phaeton. Also '37 Cord conv. State price and condition of body. V. Strand, Iroquois, Ill.

**SELL**—'41 Cadillac conv. sedan, hydramatic, all accessories, new brakes, wheel bearings, top, engine excellent; paint, leather front seat and tires fair. Car has been in storage. \$350. Dr. R. C. Fowler, 208 Centre Ave., New Rochelle, N. Y.

**SELL**—Complete Drake engine for midgeet race car, Cartwright rods, Protruzzi carbs. In and out box, radiator, oil tank, headers, exhaust pipes, head sides and all. C. Fink, 3321 Washington, Fresno, Calif.

**WANTED**—Belond exhaust system with headers for use with stock mufflers on '49 Oldsmobile 88. W. G. Wilson, Box 5458, Duke Station, Durham, N. C.

**WANTED**—Salvage '49 Lincoln V-8 engine or used '49 Lincoln heads, manifold, clutch, bell housing, water pumps and other essential engine parts. B. Bashford, 209 E. First St., Wichita, Kans.

**WANTED**—Custom sports car, good sturdy engine capable of cruising 80 economically with three passengers. Priced reasonably. Send pictures, come any distance for suitable car. J. O. Martin, Box 307, Goshen, Ind.

**SELL**—'26 Marmon model D-75 seven-passenger, six cylinder, ohv 340 cu. in. Displayed at Watkins Glen entrance race day. C. W. Fox, 1133 W. So. Ave., S. Williamsport, Pa.

**SELL**—OR SWAP—'32 V-12 Cadillac custom Fleetwood roadster. Original, engine, body perfect. Only one in captivity. Best offer or swap for sports car, speedster, phaeton or ? J. Flynn, Box 124, East Santa Cruz Station, Santa Cruz, Calif. Santa Cruz 4913-M.

**SELL**—'21 Reo seven-passenger touring, 9000 miles, perfect condition throughout, new tires and tubes. \$500. R. Falge, 12238 Moorpark, North Hollywood, Calif.

**SELL**—'48 custom Mercury sports car. Full leather interior, new Royal whitewalls, stock engine, carson. Nicest car in Calif., cost \$4000 sell for \$2000. A. Couzzi, 5832 Lexington, Hollywood, Calif.

**WANTED**—Automatic-overdrive transmission, '39 Packard Super Eight or 12. State price with or without complete controls to and including steering wheel. Give details, condition, appearance. H. Morgan, 977 N. Wilton Place, Los Angeles 38, Calif. Adams 6258.

**WANTED**—Used speed equipment for Cadillac V-8 L-head engine, circa '46; magneto, high compression heads, dual manifold, headers. Must be in perfect condition and priced below new wholesale cost. W. B. Bolmer III, Rocky Hills, N. J.

**WANTED**—Information on installing Cadillac engine and hydramatic transmission in '47 Lincoln Continental conv. Also where to obtain the parts for conversion. Dr. R. F. McLane, 1150 East Delavan Ave., Buffalo 15, N. Y.

**SELL**—Whizzer motor bike. Best offer. Also want information on where to get Crosley 4.50 x 12 tires retreaded. R. Clement, Chester Springs, Pa.

**SELL**—'49 Ford custom conv., beautiful new top and paint job. Dual Douglas's and heater. Excellent condition. \$1500. R. Clement, Chester Springs, Pa.

**SELL**—'49 Oldsmobile club sedan, radio and heater, hydramatic, low mileage, one owner, duals. \$1700. R. Clement, Chester Springs, Pa.

**SELL**—Classic '33 Lincoln KB-12 double-cowl phaeton. Completely overhauled, re-chromed, new curtains, and Cordoglas top, six excellent wire wheels, leather perfect, many extras, \$1500. H. R. Finn, M.D., 818 Ave. C at 36th St., Bayonne, N.J.

**WANTED**—'26-'36 low mileage, wire wheel Lincoln or comparable make. Also 7.00 x 17 passenger tires and no. 3001 headlight bulbs for '33 Cadillac. Van Clespe Foundation, Box 1323, Little Rock, Ark.

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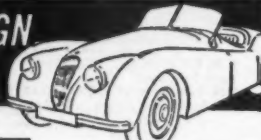


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## TRADE TOPICS

EASILY THE PRETTIEST contributor to "Trade Topics" this month is the new California distributor for GYRO SKID CONTROL, Miss Barbara Plumbo. Her word for the speed and power field... "It's no longer a man's world." The GYRO SKID CONTROL through gyroscopic action maintains an even weight distribution for the car, counteracts all horizontal vibration... controls skids, insures traction, diminishes side-hopping and makes your ride safe and comfortable. It's been tried by experts in competition, and when men like Walt Faulkner, Johnny Mantz and Troy Rutman say it's great you can pretty well figure it lives up to its claims. Just by way of a plug for the next issue of MOTOR TREND... we'll be doing an Accessory Trial on GYRO SKID CONTROL. For the impatient readers who can't wait for that story, the price is \$39.50... It's simply installed... and you can get all the details from BARLEC'S, 4916 Venice Blvd., Los Angeles, Calif. That is the aforementioned Barbara's new outfit.

★ ★ ★

ERNIE NEWHOUSE of Newhouse Automotive Industries called to remind us that this HOLT'S PISTON SEAL you've been seeing in various ads of late "is a terrific product that really works."

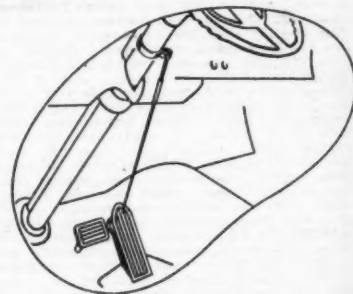


It's guaranteed by the manufacturer to effectively cut down oil consumption and help restore compression without the cost and trouble of a motor overhaul. The manufacturer's statement further stipulates: this product will not harm any engine or affect the oil circulating system; it is not merely temporary relief but a sealing action which will last up to 10,000 miles; PISTON SEAL is applied easily from the original tube through the spark plug holes to the top of each piston for instant effectiveness. Those of you who would investigate this product further, can get the full scoop from R. H. Philbrick, 220 Miracle Mile, Coral Gables 34, Florida... or if it's handier, check with Newhouse Automotive Industries in Los Angeles.

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WE HAVE ANOTHER smart answer to traction problems in the slippery months. It's called TRAXION, a mineral mixture that produces instant traction when sprayed from the handy blowgun container under spinning tires (or slipping feet). Convenient to carry, neat, simple to use... TRAXION will keep your feet under you for just \$1.25 postpaid. Write SHEA LABS, Dept. MT, Keene, New Hampshire.

LET'S GET BACK to solving your cold weather problems. Warming up your car is no longer a headache on a wintry morning when you have learned about the new ACCELA-ROD, the acces-



sory that replaces the now-eliminated hand throttle of today's cars. The Argle Mfg. Company of Colchester, Illinois, describes its product as "a long rod-like affair that fastens to the steering column with a single bolt." From our observation it is neat and attractive as they claim, can be installed simply, and adjusted easily to hold the foot feed down at faster-than-idling speeds. Sells for \$1.50 postpaid, sounds like a handy gadget.

★ ★ ★

TO BANISH FRIZZLED HAIR and jangled nerves which are nature's derivatives from the static electricity shocks from those fancy seat covers... Electro-Chemical Products Corporation, 60 Franklin Street, East Orange, New Jersey, has come up with a product known as STOPSHOK. It's a colorless, stainless, electro-chemical compound packaged in a push-button spray container. Applied in a fine mist, the carrying agent evaporates in seconds, leaving a conductive coating which bleeds off all static, thus eliminating all shock caused by sliding across the covers. No additional grounding by trailing



wires is necessary. This item sounds like a comfortable item. If you've had any painful surprises lately, write Electro-Chemical.

★ ★ ★

AT FIRST GLANCE our tag item might seem a little out of place in a motoring magazine. Lebanon Bologna! We thought so when it first came across the Trade Topics desk. But just for kicks we sent for some, served it at the Trend open house, and these "motor minds" around here voted it the accessory of the year. It's worth passing on to all men of taste. All-beef, hickory smoked, packed in 3 lb. rolls back in Pennsylvania Dutch country where they write the text on good eating... Lebanon Bologna should be a universal experience. It is shipped anywhere in the United States for \$3.75 postpaid with safe arrival guaranteed. Write PAL-MYRA BOLOGNA CO., Palmyra, Pa.

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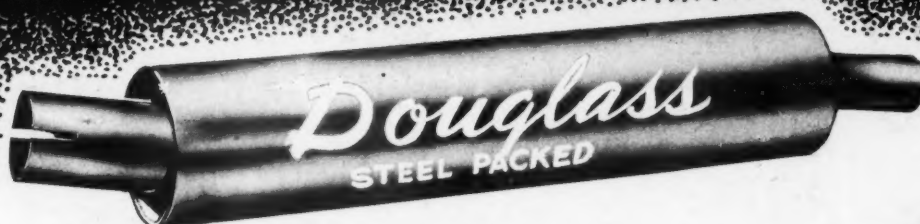
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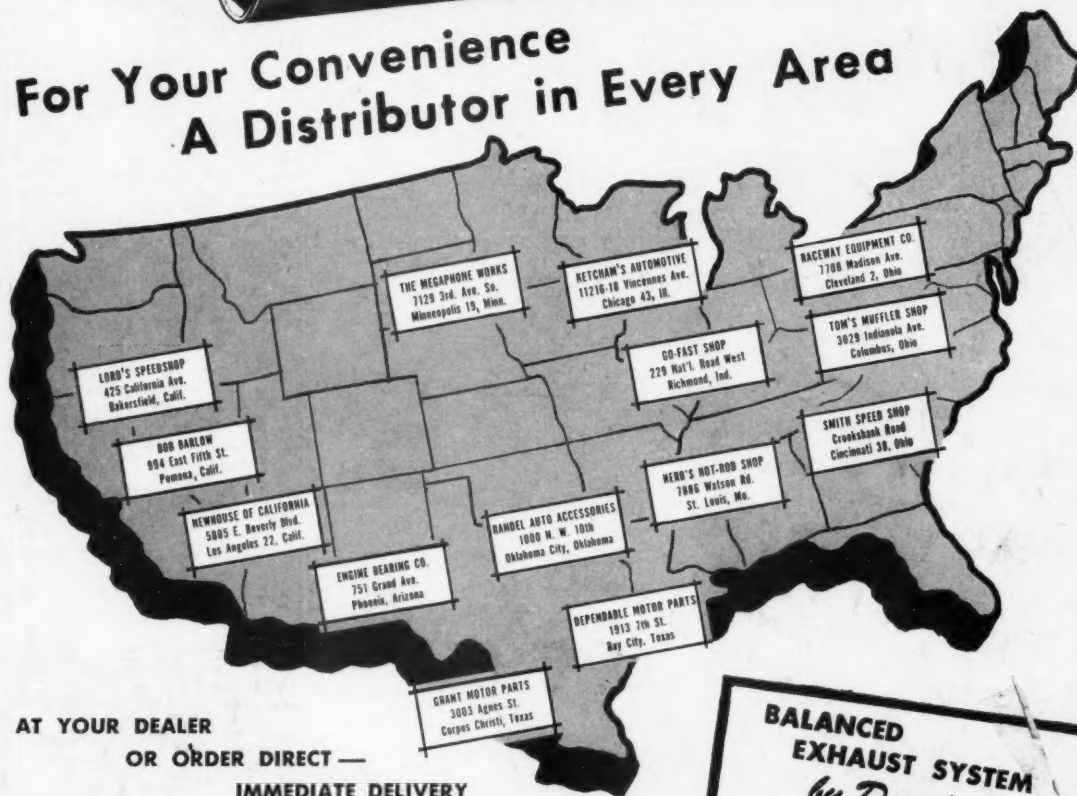




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(Note: Where no year is shown all year models are same price.)

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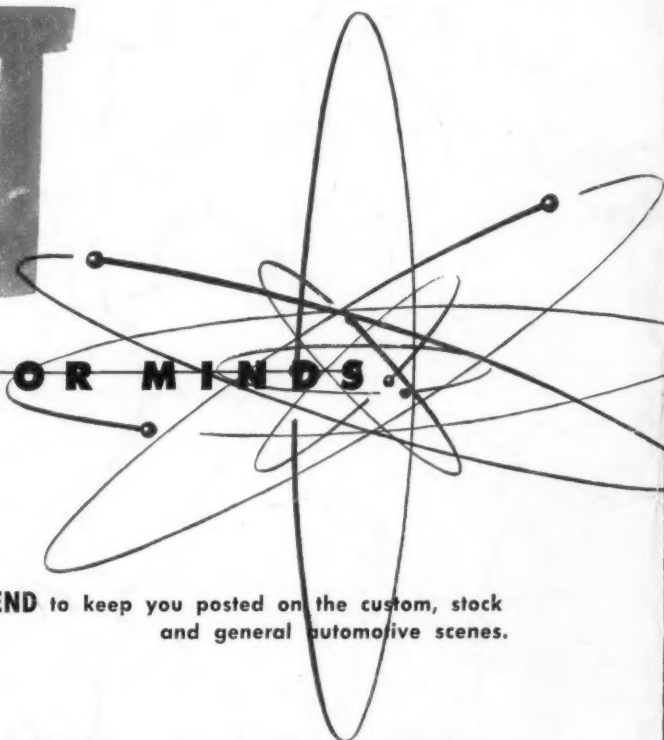
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